

**FY 2007 FEDERAL AVIATION ADMINISTRATION
(FAA) BUDGET AND THE LONG-TERM
VIABILITY OF THE AIRPORT AND AIRWAY
TRUST FUND (AATF)**

HEARING
BEFORE THE
SUBCOMMITTEE ON AVIATION
OF THE
COMMITTEE ON COMMERCE,
SCIENCE, AND TRANSPORTATION
UNITED STATES SENATE
ONE HUNDRED NINTH CONGRESS

SECOND SESSION

MARCH 28, 2006

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ONE HUNDRED NINTH CONGRESS

SECOND SESSION

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CONTENTS

	Page
Hearing held on March 28, 2005	1
Statement of Senator Burns	1
Statement of Senator Inouye	2
Prepared statement	2
Statement of Senator Lautenberg	44
Prepared statement	44
Statement of Senator Pryor	40
Statement of Senator Stevens	3
 WITNESSES	
Blakey, Hon. Marion C., Administrator, Federal Aviation Administration	4
Prepared statement	7
Dillingham, Gerald L., Ph.D., Director, Physical Infrastructure Issues, U.S. Government Accountability Office	26
Prepared statement	27
Zinser, Todd J., Acting Inspector General, Department of Transportation	12
Prepared statement	14
 APPENDIX	
Response to Written Questions Submitted by Hon. Daniel K. Inouye to Hon. Marion C. Blakey	51
Response to written questions submitted by Hon. Frank R. Lautenberg to: Hon. Marion C. Blakey	54
Gerald L. Dillingham, Ph.D.	59
Todd J. Zinser	58

**FY 2007 FEDERAL AVIATION
ADMINISTRATION (FAA) BUDGET AND THE
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TUESDAY, MARCH 28, 2006

U.S. SENATE,
SUBCOMMITTEE ON AVIATION,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Subcommittee met, pursuant to notice, at 10:05 a.m. in room SD-562, Dirksen Senate Office Building, Hon. Conrad Burns, Chairman of the Subcommittee, presiding.

**OPENING STATEMENT OF HON. CONRAD BURNS,
U.S. SENATOR FROM MONTANA**

Senator BURNS. We'll call the Committee to order this morning. And we're sorry, we probably told you the wrong place. But, thank you for coming this morning.

I want to thank the panel for joining us today. This hearing is to kick off the oversight on the FAA reauthorization hearings scheduled for this year.

I'd like to start by wishing my good friend and Ranking Member, Senator Rockefeller, a quick recovery. He's in the hospital having minor back surgery. And I've been told there's no such thing as minor back surgery, so we wish him well. And, of course, his staff is here, and very capable staff, and we look forward to his return.

Today, we'll review the Fiscal Year 2007 Federal Aviation Administration budget request, and also take a look at the long-term viability of the Airport and Airway Trust Fund, commonly known as the Aviation Trust Fund.

The budget request for Fiscal Year 2007 is \$13.7 billion, which is \$562 million less than that enacted in 2006. This represents a serious cut to all portions of the FAA budget, except the operations account. And I don't think I'm alone when I say there are members of this Subcommittee that are very concerned about some of the programmatic cuts proposed in the budget. Of special concern are the massive cuts in the AIP, or the Airport Improvement Fund. I find it very shortsighted to cut rural airport funding at a time when aviation is seeing record numbers of passengers and projected traffic numbers. Everywhere I go I ask controllers, I ask pilots about conditions. They indicate number increases in passengers and also an increase in traffic. It is a very, very real thing. To compound that, the AIP proposal is about a billion dollars below

the level this Committee authorized for the program. This Committee has consistently tried to provide infrastructure funding, only to see it carved up by a budget proposal.

This budget leaves me a little concerned that the current budgetary environment of the FAA will not have the funds necessary to plan for the next generation of air traffic management systems. Modernizing the new system is going to take innovation, spending control, and planning. And I'm afraid we're not moving quickly enough or properly funding our aviation system.

Modernizing our system will be the primary goal of the next FAA reauthorization bill. Modernization means we will need to take a serious look at the future of the Aviation Trust Fund. Currently, the Trust Fund revenues are increasing, but they will not be able to sustain us in our modernization plans. And I think that's the question the FAA will soon have to answer, working with Congress. Is the Trust Fund providing the revenues necessary for true modernization and infrastructure growth of our system.

Again, I want to thank the panel for coming today. And now I turn to my good friend from Hawaii, Senator Inouye, welcome, sir.

**STATEMENT OF HON. DANIEL K. INOUYE,
U.S. SENATOR FROM HAWAII**

Senator INOUYE. Why, thank you very much, Mr. Chairman. I don't know what I can add to your statement.

Senator BURNS. Senator Stevens?

Senator INOUYE. I do have a full statement—

Senator BURNS. Oh, I'm sorry.

[Laughter.]

Senator INOUYE. I just want to make it part of the record.

Senator BURNS. Oh, you want to make the statement part of the record.

Senator INOUYE. Yes.

Senator BURNS. Well, I appreciate your courtesy.

[The prepared statement of Senator Inouye follows:]

PREPARED STATEMENT OF DANIEL K. INOUYE, U.S. SENATOR FROM HAWAII

The Federal Aviation Administration's (FAA) 2007 budget demonstrates a startling lack of vision. The Nation's air passenger and cargo traffic is expected to triple over the next 20 years, yet remarkably, the budget does little to prepare for that enormous increase. This Administration has never been particularly adept at planning ahead, and the FAA budget is just the latest example.

In fact, the FAA's budget proposes nearly \$1 billion in cuts to the Airport Improvement Program (AIP), the grant funding source for capital improvements and safety projects at U.S. airports. In other words, it cuts the resources specifically designated to help our airports accommodate the rapidly growing demand. At the proposed levels, major airports across the country would see a more than one-third reduction in their annual capital funding and small airports would have their funding eliminated.

The Administration contends that this budget supports development of the Next Generation Air Transportation System, the centerpiece of the FAA's modernization plan. However, according to the Department of Transportation Inspector General's analysis, the FAA's budget will only sustain the current system and will not support the integration of any new technology.

Each one of us is on a plane every week. We speak to the airport directors in our states regularly. We know quite clearly what they are up against, and we experience it first hand. This FAA budget does not even begin to reflect the challenges our system is facing.

Additionally, as we are all aware, the Nation's economic competitiveness has elevated to the top of the Committee's agenda over the last year. Aviation infrastructure and aerospace research have been key competitive advantages for the U.S. Our aviation system's safety and efficiency have made it the envy of the world, and our advanced aerospace research has allowed us to stay ahead of our global competitors.

Those advantages are eroding, and we are in real danger of losing our position as the world's leader in aviation and aerospace. Not only is our air traffic system becoming overcrowded, the controllers who help guide our planes are beginning to retire in large numbers, and we do not, as of yet, have adequate replacements. Similarly, the proposed cuts to aerospace research demonstrate that the FAA is willing to cede our traditional advantage and renowned expertise.

In passing Vision 100, several years back, we provided a blueprint for you to meet future challenges. This budget suggests that you are not following it.

Making matters worse, the FAA has yet to negotiate an agreement with the air traffic controllers. I would like to see the parties resolve this matter voluntarily. Congress should not have to be the final arbiter.

I appreciate that the Federal budget is tight, but the President must also understand that the current financial situation is largely a crisis of his own making. Not long ago, we were actively reducing the deficit, while still fulfilling critical obligations that furthered the public good. Now, we are constantly looking for places to cut the budget, often at the expense of projects that are widely recognized as necessary.

We need to build a modern, National Airspace System (NAS) that meets the public's growing demands, and it will require vision and resources. Since the Administration has yet to provide either, it is up to Congress to deliver both.

Senator BURNS. Senator Stevens?

**STATEMENT OF HON. TED STEVENS,
U.S. SENATOR FROM ALASKA**

The CHAIRMAN. Mr. Chairman, I also second the statement that you've made. I do think, however, we should be quite aware of the fact that there's an increasing number of aircraft entering this system. And that will be accelerated as these new small jets—I call them the "mosquito fleet"—start entering general and private aviation for the business world. This system has to be prepared. So, we're going to work with the FAA.

On the other hand, I've got to say, recognizing the costs of the war on terror, every department has had cuts, and these cuts are tough, and it is hard for us to determine how the FAA will survive with those cuts. I think we all have to sit down and make certain that the allocation of the funds that come before the Appropriations Committee is a fair, balanced one, as far as all of the systems. And this is one of the key systems of our country. And, of course, in my state 70 percent or more of the cities can be reached only by air. Now, we, of all Americans, depend upon this system. And I look forward to working with all of you to make certain that it will work.

Thank you.

Senator BURNS. And thank you, Senator Stevens. And your full statement will be made part of the record.

The CHAIRMAN. That was my full statement.

Senator BURNS. Oh, that was your full statement?

[Laughter.]

Senator BURNS. Last night, I introduced the President, and he made the statement last night that to listen to Conrad Burns speak makes him a Shakespeare.

[Laughter.]

The CHAIRMAN. Who?

Senator BURNS. The President.

[Laughter.]

Senator BURNS. OK?

Director Blakey, thank you for joining us this morning. And we look forward to your statement.

**STATEMENT OF HON. MARION C. BLAKEY, ADMINISTRATOR,
FEDERAL AVIATION ADMINISTRATION**

Ms. BLAKEY. Thank you, Mr. Chairman. Chairman Stevens, Senator Inouye, it's a true pleasure to be here. And I hope you all will pass on our best wishes for a speedy recovery to Senator Rockefeller, as well.

I do want to thank you for this opportunity to address the Committee on what I think is a very important topic. Your request for a discussion of the budget and the viability of the Trust Fund comes at a most opportune time. As always, safety remains our number-one priority, and this is a barometer, I believe, of our success.

As you know, the trends in commercial and general aviation show consistent improvement. In terms of sheer numbers alone, over 2 billion passengers have traveled in our system in the last 3 years. Two billion. That's about seven times the population of this great Nation. Without question, it's an impressive safety record. But, tragically, during that same period of time, we lost 33 people, also in accidents. The diligence of an entire aviation community makes this possible—pilots, mechanics, inspectors, controllers, engineers, and technicians.

With that said, we are equally diligent about conducting the business of government and overseeing aviation. We serve both the passenger and the taxpayer. That's why Congress mandated that we, the FAA, must realign our operations and manage more like a business. We are eager to rise to that challenge.

The tangible results of the FAA's efforts over the past 3 years are reflected in our Fiscal Year 2007 budget request of \$13.7 billion. It upholds our commitments to increase the safety, capacity, and efficiency of the system. But, even so, aviation finds itself at a time that's both precipitous and precarious.

The President's budget for 2007 addresses our needs in the short term, but the larger issue, the Aviation Trust Fund, is a constant reminder that significant challenges loom on the horizon. That's why we must move quickly to establish a funding mechanism for the FAA that's reliable and consistent, a funding stream tied directly to the actual cost of what it takes the Federal Government to serve the business of aviation.

At the forefront is a predicament of enormous consequence. The FAA's funding now is beholden to the Airport and Airway Trust Fund, which was established all the way back in 1970. The Trust Fund receives revenue from a number of sources—aviation excise taxes, including a domestic segment tax, an international passenger tax, commercial and aviation fuel tax—but the primary source of income for the FAA's operations and capital accounts is a 7.5 percent ticket tax on the price of commercial airline tickets. As the price of those tickets fell, competition increased, but our revenue stream suffered.

I think a picture can be worth the proverbial thousand words, so indulge me for a couple of moments here just illustrating this.

As you can see from this chart, our revenues simply cannot keep up. As recently as 2000, the Trust Fund revenue was sufficient to cover the entire FAA budget. That's on the far left side over there, where you see the lines intersecting. But not anymore. Over the last 5 years, a widening gap has resulted in the need for greater Trust Fund—General Fund contributions or drawing down the Trust Fund, or both.

The future looks equally dim. The next chart shows that tying the plan to pay for FAA operations to the Trust Fund injects substantial uncertainty into our planning process. The green line shows what we expected the future of the Trust Fund to be back in the year 2000. The premise was based on the industry's \$8 billion profit that year. Remember that?

The premise, unfortunately, was wrong. 9/11, the subsequent wave of bankruptcies, the dip in ticket prices couldn't be forecast by anyone, nor were they. In short, the volatility of the Trust Fund pre-empts any long-term planning. Even though the Trust Fund revenues show slight recovery, it's still about \$3 billion below what we forecast in 2000. And the bigger problem is this—the shortfall for the entire period of 2001 to 2007 will likely total \$20 billion.

As you know, regardless of the state of the Trust Fund, the FAA's workload continues to rise. The next chart is a relatively accurate shorthand method of showing how much the FAA's workload is on the increase. Departures are a major driver. And, as you can see, they've been on the rise for 15 years. I draw your attention to the red line, which shows the volatility of the Trust Fund during that same period. Regardless of the revenues' peaks and valleys, the workload is steadily on the rise. History shows that whether revenue goes up or revenue goes down, the workload does not decrease.

No matter what the revenue picture looks like, all of the taxes that fuel the Trust Fund will expire on September 30, 2007, and the Administration is finalizing a proposal to address these challenges. The time to act is now. If we don't, we're going to be unable to establish a realistic funding scheme that will address the potential for gridlock. If we don't act, the hard drive of aviation will spin more and more slowly, except rebooting aviation and the system in which it operates will not happen at the mere press of a button. On this issue, there's no middle ground. There's no real safe haven for inaction.

As you well know, the post-9/11 aviation industry has undergone enormous change. The market now features a move away from the wide-bodied jet to a greater number of smaller jets, which carry fewer seats and discount ticket prices, to boot. The math here is simple. The passenger numbers continue to increase. Forecasts anticipate 1 billion passengers by 2015. We are already at 739 million. That's above 9/11 levels. Low-cost airlines and regional jets have taken an ever-increasing share of the market. The workload increases, but, because of cheaper tickets, the revenue to the Trust Fund has not increased commensurately.

The Administration has been taking steps to address this situation. Under the leadership of Secretary Mineta, the FAA has been

moving toward operating more like a business. Our business plans mirror the industry we serve. We've organized our entire air-traffic services department, cutting multiple levels of senior management, reducing our executive ranks by 20 percent. We've streamlined operations, eliminating and consolidating administrative staffs and our accounting departments. We've also completed the largest nonmilitary A-76 program in the history of the Federal Government, reducing the number and cost of our Automated Flight Service Stations while increasing technology and service to the public—better service, lower cost, saving \$1.7 billion over 10 years. And we continue to negotiate in good faith with our controllers union.

You have my firm commitment that we cannot, and will not, sign a contract we cannot afford. Operating more like a business will help us operate more efficiently, but we still need to pay for the next generation air transportation system. With the number of passengers continually on the rise, we know with certainty that the capacity of the system is reaching its limits. The technology used by airlines and businesses is moving forward with great speed, as well. Very light jets, the "mosquito fleet" that Chairman Stevens refers to, personal taxis, they are soon going to start being delivered, be in hangars around the country. At a cost of a little more than \$1 million apiece, these jets will expand the service of aviation to airports well outside the majors that now dominate our transportation industry. We forecast that 100 of these very light jets will be delivered this year, ramping up to 500 per year by 2010. And that's just the beginning. The next generation air transportation system must accommodate business jet and regional jet fleets that are significantly larger than levels at the turn of the century. The U.S. business jet fleet, by 2008, will be approximately 45 percent larger than 2000 levels. The regional jet fleet will be three and a half times bigger.

That brings us to the question which is most difficult to answer, how do we pay for it? Right now, our revenues have no direct relation to the cost it takes to run things and invest in the future. As I've said before, we might as well link our revenues to the cost of a gallon of milk. But, hyperbole aside, if the revenue stream bears little relation to actual cost, we're stuck on a treadmill that leads absolutely nowhere. The unfortunate truth is that the system continues to fully tap the resources we have.

The Secretary has convened six Cabinet-level agencies to put together the next generation air transportation system. Unless a consistent and cost-based revenue stream is established to pay for it, the effort's likely going to be for naught. As it is, the agency is heading toward a balancing act among competing resources. Do we cut back on air traffic services? Do we slow the course of modernization? Do certification efforts for the new aircraft take a slow roll? In short, it's robbing Peter to pay Paul. And that's untenable.

But it's not as farfetched as it's likely to be. That's why we reached out to Wall Street, to industry, to our stakeholders, obviously to you all, our legislative leaders, searching for ways to address the Trust Fund issue.

Our draft proposal is being finalized right now. Our goal is to create a funding structure that creates a clear link between our revenue stream and the cost of providing services. We intend to

recognize the unique features of different FAA services and different aviation user groups, taking into account all the input we've received, as we develop a financing structure that's sustainable and supports the development of the next generation system. As we do this, we'll make every effort to balance, effectively and efficiently, the way the system is used and by whom.

In closing, let me, again, emphasize the need for a stable, consistent funding stream. I define "stability" as revenue driven by the same factors that drive our costs. Simply put, our revenue and our costs need to be on the same platform, moving in the same direction. Unless and until that happens, we'll be moving in a direction that neither the FAA nor the industry wants to go. We'll be heading for a destination our economy can't afford.

Thank you very much.

[The prepared statement of Ms. Blakey follows:]

PREPARED STATEMENT OF HON. MARION C. BLAKEY, ADMINISTRATOR, FEDERAL AVIATION ADMINISTRATION

Chairman Burns, Senator Rockefeller, Members of the Subcommittee:

I welcome the opportunity to be here today, along with my colleagues from the Inspector General's Office and the Government Accountability Office (GAO), to discuss the state of the Federal Aviation Administration's (FAA) financial health, specifically our budget for Fiscal Year 2007 and the condition of the Airport and Airway Trust Fund (AATF or Trust Fund). The financial health of the Aviation Trust Fund is closely linked to the stability of the aviation industry. I understand that today's hearing will lay the foundation for a hearing in several weeks where future funding options for the FAA will be addressed in detail. I look forward to returning and discussing the specifics of the Administration's proposal.

First let me briefly express appreciation for the dialogue that has begun with our stakeholder community. Over the past year, under Secretary Mineta's leadership, we have conducted a broad outreach to the aviation community to explore funding options that would be in the long-term best interest of the traveling public, the aviation industry and the FAA. We held a public forum last April and have conducted numerous group and individual briefings with our stakeholders. To inform the dialogue we published detailed industry activity data as well as a set of principles which we thought should underlie and guide the discussion. In my view the thoughtful comments we have received have greatly informed our decision making. We at the FAA have listened intently and have benefited from a wide range of expert views.

As I've often stated over the past year during our outreach, our belief in the need for funding reform for the FAA is not fundamentally about generating more money for the FAA. It is about creating a more rational, equitable and stable system that provides appropriate incentives to users and to the FAA to operate more efficiently and facilitates modernization of the aviation system on an assured and predictable basis.

Fiscal Year 2007 Budget Proposal

I would like to address the FAA's budget in the near term. As you know, the FAA operates 24 hours a day, 7 days a week, 365 days a year. We run a multi-billion dollar air traffic control system that in FY 2005 served 739 million passengers and over 39 billion cargo revenue ton miles of freight. We operate and maintain a system comprised of more than 70,000 facilities and pieces of equipment. There are FAA-operated or contract towers at 500 airports, and we are also responsible for inspection and certification of about 220,000 aircraft and 610,000 pilots. We have some 43,000 dedicated government employees working to serve the traveling public and the businesses that depend on the air transportation system.

When Congress mandated the FAA to realign our operations and manage more like a business, we rose to the challenge. The FAA's efforts over the past three years have paid real dividends, not just to the flying public but to the taxpayer as well. By implementing improved management tools, including better cost-accounting systems and instituting a pay-for-performance program, we have been able to make better use of our resources. The tangible results are reflected in our FY 2007 budget

request of \$13.7 billion. The request upholds our commitments to increase the safety, capacity, and efficiency of the national aviation system.

The FY 2007 budget provides \$8.4 billion for our Operations account and reflects the rising labor costs and challenges the FAA faces. This year, we completed the largest A-76 competition in government and will see the first installment of cost savings—\$66 million—in FY 2007. This contract not only saves money; it also commits the vendor to modernize and improve the flight services we provide to general aviation pilots. The agency's emphasis on bottom-line results has not been easy. The FAA has slashed costs where possible and slowed the rate of growth of our labor costs through productivity improvements. We also continue to apply effective management and financial principles to our labor negotiations. The simple fact of the matter is that we cannot and will not sign a contract that the taxpayer cannot afford. Since 1998, the first year of the current NATCA contract, the increasing imbalance in compensation between NATCA and the rest of the agency has cost the taxpayer \$1.8 billion. Neither the FAA nor the taxpayer can afford a repeat performance. As a result, future labor agreements will be fair, affordable and protect management's rights. We have been negotiating with NATCA for more than eight months, and I am hopeful that we will be able to reach a voluntary agreement, particularly now that both sides have been working with the help of a Federal mediator during the last few weeks. Both sides recently agreed to a short extension of the mediation, and I anticipate this will come to closure shortly, hopefully by a voluntary deal.

Long-term affordable pay structures are only a part of the equation. In addition, we are taking steps to achieve savings of 10 percent by FY 2010 in controller staff costs through productivity improvements. We achieved the first 3 percent of this goal in FY 2005 and, overall we avoided approximately \$23 million in costs last year. This fiscal year and in FY 2007, we project a minimum of a 2 percent productivity improvement each year.

We expect a continuous wave of controller retirements over the next 10 years, as 72 percent of our air traffic controllers become eligible to retire. Bringing aboard new controllers is a complex process and it takes several years to train a controller. Our budget request supports our hiring needs for both air traffic controllers and safety inspectors.

For Facilities and Equipment (F&E), we are requesting \$2.5 billion to improve and modernize the airspace system. We are also scrutinizing our capital investments; revisiting business cases and weeding out programs whose benefits no longer justify the costs; and we are increasing our emphasis on programs that will save the agency money.

We are making similar inroads with equipment. In FY 2005, we removed 177 navigation aids from service, which saved the taxpayer about \$2.7 million. This year, we plan to remove 100 more, followed by another 100 in 2007. We are taking steps to save wherever possible. In fact, our five-year strategic plan, the FAA Flight Plan, sets cost savings and productivity improvement goals for all organizations in the agency.

Our resources and activities are closely linked with the dynamic industry we oversee and serve. The pace and depth of change in aviation is unparalleled. Business models evolve as rapidly as the technology changes: markets once dominated by wide body aircraft are now giving way to smaller jets. Entrepreneurs now are marketing microjets, which may one day become the "personal taxi" of the sky. Fractional ownership is making it easier for businesses to own and operate aircraft.

Even with the financial shake-up in the airline industry, all major forecasts project that the demand for air travel will outstrip existing capacity. After a very slight decline in projected operations at airports with FAA or contract towers, we forecast an average annual growth of two percent and forecast a three percent annual growth for en route operations (from 2005–2017). Air travel now exceeds pre-September 11 levels and remains on track to carry more than 1 billion passengers by FY 2015.

The future portends a wide range of aircraft with divergent infrastructure, air traffic management, regulatory, and procedural requirements. We must be prepared to support a system that includes the A380 and the microjet (and everything in between). We must be able to support airlines, large and small, national and regional. Recognizing that aviation represents about nine percent of America's Gross Domestic Product, we must provide this infrastructure in time to keep the U.S. economy growing while controlling the costs of that system.

Safety

Safety remains our number one priority and our number one success story, with the trends in both commercial and general aviation showing consistent improve-

ment. The safety record we have achieved for air carriers is a remarkable accomplishment, which our entire workforce—inspectors, engineers, technicians, and controllers—shares with the broad aviation community. Over the past four years, 3 billion people have traveled safely in the air transportation system—that's ten times the population of the U.S.

The FY 2007 budget reflects the agency's steadfast commitment to safety. Out of a total request of \$13.7 billion, about 70 percent, or \$9.6 billion, will contribute to our efforts to improve our already historic safety record. This includes further progress in reducing commercial and general aviation fatality accidents, the numbers of runway incursions, and HAZMAT incidents. Our overarching goal is to measure and achieve the lowest possible accident rate, while constantly improving safety.

Grants-in-Aid to Airports

In today's challenging budget environment, we have been forced to take a long hard look at our funding requirements. Our FY 2007 budget request for Grants-in-Aid to Airports is \$2.75 billion which is lower than recent authorized and enacted levels. Nevertheless, under our proposed budget, FAA will be able to support all high priority safety, capacity, security and environmental projects. There will be adequate funds to meet all current and anticipated Letter of Intent (LOI) commitments, which relate to high priority, multi-year projects within the national system. The President's Budget includes support of major capacity projects such as the Chicago O'Hare redesign, new runway at Washington Dulles International Airport and major projects at Atlanta-Hartsfield International. We will also be able to fund projects to meet the FAA's Flight Plan goal for improving runway safety areas (RSAs), help airports meet their Part 1542 security requirements, and continue work on phased projects.

Technology for the future

We are laying the foundation for our future with a commitment to increasing the system's capacity to accommodate the air transportation system's predicted growth. We will meet these future needs by harvesting new technologies that will support the Integrated National Plan for the Next Generation Air Transportation System (NGATS). This Plan, submitted to Congress in December 2004, brings together six cabinet-level groups in the Joint Planning and Development Office (JPDO) to eliminate duplication and wasted resources. The Plan is a roadmap that will leverage Federal funds and allow us to provide the national aviation system that can handle the safety, capacity and security needs of the future.

For the FAA, the Plan has already been integrated into our budget. Our 2007 budget begins to build this new infrastructure by, for example, supporting two promising technologies: Automatic Dependent Surveillance-Broadcast (ADS-B) and System Wide Information Management (SWIM). The capabilities of ADS-B are already proven in the field. ADS-B provides: (1) automatic broadcast of aircraft position, altitude, velocity, and other data; (2) enhanced "visibility" of aircraft and vehicle traffic for pilots and air traffic controllers; and (3) use of Global Positioning Systems, allowing us to reduce our reliance on ground-based infrastructure. SWIM makes advanced information distribution and sharing capabilities possible. Every year, FAA builds applications for air traffic management systems that require unique interfaces between the new application and existing systems. SWIM will replace those unique interfaces with a reusable interface and provides many operational benefits.

The above overview of our FY 2007 budget is how we propose to meet the challenges over the near term for the FAA, and also provide for the long-term with our Integrated National Plan for NGATS. At the same time, we are also planning for the next reauthorization of our programs and how those programs will be funded. Critical to that endeavor is an examination of the status and outlook of the Airport and Airway Trust Fund and what that means for the FAA's long term financial picture.

The Airport and Airway Trust Fund

The Airport and Airway Trust Fund was created in 1970 to provide a dedicated source of funding for the aviation system. Before there was a Trust Fund, a 5 percent tax on passenger airline tickets, a general aviation fuel tax, and a tire and tube tax were deposited in the General Fund. Today Trust Fund revenues are generated by a combination of taxes that were last authorized in 1997: a domestic passenger ticket tax of 7.5 percent of the price of a ticket, a domestic flight segment tax of \$3.30 per segment per passenger, an international departure/arrival tax of \$14.50 per international passenger, an Alaska/Hawaii departure tax of \$7.30 per passenger traveling between these states and the continental U.S., a 6.25 percent waybill tax on domestic cargo and mail, a general aviation (GA) jet fuel tax of 21.8 cents per

gallon, a GA aviation gasoline tax of 19.3 cents per gallon, and a commercial fuel tax of 4.3 cents per gallon. The domestic segment tax, international departure/arrival tax, and Alaska/Hawaii tax rates are indexed to the Consumer Price Index and have increased each year for the last four years, but the airline ticket tax is a fixed percentage of the ticket price, so it is dependent on changes in airline ticket prices rather than general inflation. These taxes and fees are scheduled to expire in September 2007, which also coincides with the end of the current authorization for FAA programs under Vision 100.

Each year, the FAA is funded by annual appropriations drawn both from the Aviation Trust Fund and from the General Fund. There has been a long history of funding a portion of the FAA's operating costs out of the General Fund due to recognition that aviation provides benefits to the non-traveling public and to our economy as a whole. However, the ratio of General Fund versus Aviation Trust Fund financing has varied over the years. The General Fund share of total FAA appropriations has been as high as 59 percent (in FY 1984) and as low as zero (in FY 2000). The trend, however, is not in question. On average over the last 15 years, the portion of operating costs coming from the General Fund has declined steadily. In FY 2005, about 20 percent of the FAA's total budget came from the General Fund and 80 percent from the Trust Fund; this year it's 18 percent and 82 percent, respectively.

In recent years, appropriations from the Trust Fund have been funded not only from the annual revenue going into the fund and interest posted to the Trust Fund, but also from drawing down the AATF's balance, which was over \$7 billion as recently as 2001. A gap exists when you compare the revenue going into the Trust Fund with the level of our costs, and this gap is quickly eroding the Trust Fund. Since the start of FY02, the uncommitted balance* of the Trust Fund has declined by more than \$5.4 billion, or an average of 28 percent per year. When there is no relationship between the level of revenue being raised to the costs being funded from the Trust Fund, factors such as fluctuating ticket prices that do not raise enough revenue, volatile demand so there are fewer passengers paying for travel, and fundamental changes in the airline industry such as the decreasing size of aircraft being used for commercial transport, lead to a revenue shortfall that has been funded by drawing down the Trust Fund balance. With the increasing pressures on the budget to fund military and national security needs, the Trust Fund remains a critical necessity in closing the funding gap. Last year (FY05), the uncommitted balance at the end of the fiscal year was \$1.9 billion and, this fiscal year, the President's budget projects that it will dip to approximately \$1.7 billion at the end of the fiscal year.

The FY 2006 projected level of the uncommitted balance is sobering because it leaves only a small "cushion" in the Trust Fund balance. In addition, our ability to rely on an increased General Fund contribution to bridge any gap is in question due to competing budget pressures as well as the effort to reduce the Federal deficit.

As we look to the future, we see a complicated air traffic control system and workload. As noted above, scheduled commercial passenger demand, which dipped severely in the wake of 9/11, exceeded pre-9/11 levels last year reaching a record 739 million passengers, up from 690 million in FY 2004. We expect that domestic passenger totals will continue to grow at approximately three percent per year with the international sector growing five percent per year.

Low-cost carriers and regional carriers (using smaller jets) are continuing to redefine the market. Revenue passenger miles (RPM) for the regional carriers are expected to grow almost seven percent per year, and we forecast annual RPM growth of almost eight percent for low-cost carriers. We forecast that regional carriers will increase their share of the U.S. domestic market from 22 percent last year to more than 25 percent by 2017. In FY 2005, commercial activity at 23 of our 33 major airports exceeded FY 2000 (peak) activity levels. Las Vegas (37 percent); Ft. Lauderdale (33 percent); Salt Lake City (30 percent); and Minneapolis (30 percent) experienced the greatest increases in operations.

It is of course very good news for the aviation industry that demand is back, but it is back in different ways than before. While low fares are good news for the passenger, they spell trouble for the Trust Fund with its heavy reliance on the ticket tax as its primary source of revenue. Approximately 50 percent of the Trust Fund revenue currently comes from the 7.5 percent tax on domestic airline tickets.

*The uncommitted balance consists of surplus revenues in the Trust Fund against which no commitments, in the form of budget authority, have been made. This measure provides the most widely-accepted estimates of the amount of money available in the Trust Fund for new appropriations for aviation purposes.

Industry changes also have implications for the FAA's workload. The airlines are trying to control costs by using increasing numbers of smaller aircraft. This trend adds to the workload of air traffic controllers without increasing tax revenue commensurately. Regional jets normally carry fewer passengers than the larger airliners, so the movement toward smaller passenger aircraft contributes to the decline in the Trust Fund revenue per flight. If an airline carries a given number of passengers (paying the same fares) on two regional jets instead of one larger jet, ticket tax revenue does not change, but controller workload approximately doubles. Our latest forecasts indicate that the growth in the number of smaller aircraft is expected to continue, driving down the average number of seats of a domestic aircraft through 2011. Plainly, our revenue is not tied to the cost of the service, which means that there is no nexus between actual workload and how it's paid for.

Increased air traffic operations are not the only source of increased workload for the FAA. In recent years the industry has also seen more new entrant carriers. While this is good news for competition, it also has workload implications for our agency. Right now, there are 10 applications in the queue awaiting review and certification by our safety staff, and each of these new operators will bring additional pilots and crew into the system. Also, with regard to our airport grant program, Vision 100's increase in funding for the Airport Improvement Program (AIP) coupled with a new entitlement formula apportionment for non-primary airports increased our workload in processing grant applications by fifty percent.

Knowing what is happening with Trust Fund revenues and how the changes in the aviation industry affect our workload is only part of the equation. We know we must also continually work very hard to control our costs—to make changes and become more efficient, more business like. We are changing the agency's structure with a major shift to a performance-based organization, and, as I noted above in discussing our budget proposal, making tough choices with our funding. We have implemented a cost accounting system in the ATO that provides our managers and executives with the information they need to identify and eliminate wasteful spending, hold or reduce operating costs, and better link financial performance to mission objectives. That cost accounting system is being extended throughout the FAA this year to help us better assess and control our costs.

I've already mentioned our cost savings measures by the ATO, our challenges with our labor negotiations and with future controller hiring. We are also faced with an aging and deteriorating inventory of facilities and equipment. The average condition of the FAA's 21 en route air traffic control centers is poor and getting worse each year. As this Committee well knows, modernization of the air traffic control system is critical if the agency is to keep up with what aviation brings tomorrow. The price tag for these facilities and equipment alone is \$2 billion per year in capital funds just to maintain current services.

In addition to maintaining the current infrastructure, the JPDO is planning for the emergence of the next generation of the air transportation system out to 2025, charting the course for satellite based navigation, handling new aircraft classes, on-demand services, and the increasing growth in air traffic. However, the move to a modern, efficient and technology-driven aviation system is going to require sustained, multi-year investments. We will need to invest resources in order to make the transition to a new system that will significantly reduce operating costs and better serve our customers in the long run.

What I have outlined above—the condition of the Aviation Trust Fund in the context of the growth in demand and industry restructuring, and the fact that FAA's future funding requirements will significantly outpace revenue from aviation taxes—clearly highlights a couple of issues. During the most recent reauthorization cycle for the current aviation excise taxes (1996–1997), Congress allowed the authority for those taxes to expire twice, which resulted in a \$5 billion loss in revenue to the Trust Fund. We cannot afford to let that happen again. Two, the FAA needs a stable source of funding that is based both on our costs and the services we provide so that we can meet our mission in an extremely dynamic business environment. Airline ticket prices are not related to any real measure of productivity for the FAA. Regardless of how many operations we run through the national airspace system or how quickly we can certify new aircraft products and technologies, or how we continue to drive down the already low accident rate, the primary source of Trust Fund receipts is linked to the price of a ticket. That approach will not sustain us into the future.

Tying funding to the cost of providing service protects both FAA and the customers who use FAA services by not subjecting our ability to provide a certain level of service to unrelated factors like ticket prices. A stable, cost-based revenue stream can also ensure funding for long-term capital needs. We also believe that a cost-based revenue structure would provide incentives to our customers to use limited

resources efficiently and to the FAA to operate efficiently, as stakeholder involvement can help us ensure that we are concentrating on services that the customer wants and is willing to pay for.

Conclusion

We believe that the revenue stream that currently funds the FAA is not tied to the cost of the services and that there is a need for funding reform. FAA's workload continues to increase. The current system, largely based on the ticket tax, provides no nexus between the actual workload of controlling flights and providing other services and how they are paid for. It is time for change.

Mr. Chairman, ten years after the NCARC recommendations, we are tackling probably the hardest part of reform: how the aviation transportation system will be financed in the next decade and beyond. Our proposal for funding reform for the FAA is now under review within the Administration. As I noted at the outset, it is the product of extensive public outreach, analysis, and a lot of creative thinking. It will propose a cost-based funding structure which will ensure that our costs and revenues are aligned and that our stakeholders are treated equitably. The details will come soon in the form of a legislative proposal, which I hope will be the basis for ongoing dialogue with this Committee and others in Congress, our colleagues in the aviation community, and the public.

I look forward to the debate and expect that the discussions will be frank, open and spirited. We have an opportunity in the near future for positive change, to correct the faults of the current system that threaten our ability to meet future demand. Change is always unsettling and difficult and requires patience and hard work, but to be ready for tomorrow we must begin today. It is the only way that we will be able to continue to operate and maintain the world's safest system with the capacity our economy needs.

That concludes my testimony. I would be happy to answer any questions you may have.

Senator BURNS. Thank you.

Now we'll hear from Todd Zinser, Acting Inspector General, Department of Transportation. Thank you for joining us this morning.

STATEMENT OF TODD J. ZINSER, ACTING INSPECTOR GENERAL, DEPARTMENT OF TRANSPORTATION

Mr. ZINSER. Thank you, Mr. Chairman and Members of the Subcommittee. We appreciate the opportunity to testify today on FAA's 2007 budget and the state of the Aviation Trust Fund.

An important point we'd like to make this morning, Mr. Chairman, is that FAA's 2007 budget focuses mainly on the status quo, in keeping things running. Right now, this Committee does not have a good handle on FAA requirements with respect to what is needed for the next generation air traffic system. This will be a critical issue for this Subcommittee and FAA as deliberations begin over the next reauthorization.

For FY 2007, the agency is requesting \$13.7 billion, which is \$561 million less than last year's appropriation, and nearly \$1.5 billion less than the authorized amount. FAA's overall budget has remained relatively flat over the past 4 years, but, compared to last year, there are big differences in the distribution of that request. The operations account is up 3 percent over last year, while the capital and airport accounts are down 2 and 22 percent, respectively. I'd like to highlight some of the key issues within those three accounts.

First, operations, FAA's biggest account, and over 60 percent of the budget. FAA is requesting \$8.4 billion for 2007 operations, \$262 million more than last year. We see two big challenges here. First is completing contract negotiations with NATCA. The talks are down to some of the most difficult issues, including pay. Ideally, in

the end, the contract will be mutually agreed to, affordable, and result in much-needed productivity gains for FAA.

The second challenge in the operations account is addressing a surge in controller retirements. FAA estimates over 70 percent of the existing controllers will leave the FAA over the next 10 years. FAA's December 2004 report is a good first step, but it has two major gaps.

One is, it doesn't have an estimated price tag. Hiring and training 12,500 new controllers will be an expensive proposition, especially since it takes new controllers between 2 and 5 years to become fully certified.

Two, the plan doesn't address hiring and staffing by location. There are over 300 FAA-operated air traffic control facilities, many with significant differences in the complexity of the operations, which, in turn, drive the cost of operating those facilities. Without such facility-by-facility numbers, FAA will lose a significant opportunity for productivity gains and cannot reliably project its operation cost for the future.

For 2007, FAA is requesting \$2.5 billion for its F&E account, which is about 50 million less than last year. This is also the fourth consecutive year that F&E requests are below authorized levels. The majority of FAA's capital account now goes for keeping things running, not new initiatives. FAA has deferred or canceled a number of projects as funding for F&E remained flat. Many of the ongoing efforts are maturing and completing them within cost and schedule is critical to allow room in the budget for future initiatives. Two projects worth noting are ERAM and FTI.

ERAM is intended to replace host computers at en route centers. It is one of the most expensive and complex acquisitions in FAA's portfolio, with an acquisition cost of \$2.1 billion. This year is critical for ERAM, because FAA will spend a million dollars a day on the program. But, more importantly, if it's not kept on track, there will be a cascading impact on FAA's ability to deliver future systems. This is a critical watch item.

We have concerns about the FTI program and whether or not it can be completed on time. FAA's FTI program is an effort to replace and reduce the cost of FAA's entire telecommunications systems. It has an estimated life-cycle cost of \$2.4 billion through 2017. We recently issued a draft report on FTI and consider it a high-risk program. Only months after being rebaselined in December 2004, the program began falling behind its installation schedule and has not recovered. Projected savings are diminishing as we speak, and the program needs to get on track.

The biggest reduction in FAA's 2007 request is in the airports account. At \$2.7 billion, the 2007 budget request is \$764 million less than 2006, and \$1 billion less than the authorized amount. The bulk of the planned reductions, \$624 million, will occur in formula grants. With this decrease in available AIP funds, FAA will need to better manage airport grants. One area we recently examined is how airports dispose of land acquired for noise abatement. We found that FAA could recover \$242 million at just the 11 airports we looked at.

Let me conclude this morning, Mr. Chairman, with three observations about the Trust Fund and the General Fund.

First, Trust Fund revenues have actually been increasing, and now exceed pre-September 11th levels, and 2007 Trust Fund revenues are projected to be \$11.7 billion. Second, however, FAA's 2007 budget request exceeds the projected revenues by \$2 billion, and FAA estimated, in 2007, that the General Fund will contribute \$2.9 billion, or 21 percent of its total budget. That amount is similar to what's been contributed by the General Fund over the last 3 years.

Third, the uncommitted balance in the Trust Fund has been depleted, going from \$7.3 billion in 2001 to a projected \$1.7 billion in 2006, and may no longer be a viable option as a stopgap measure or buffer for FAA funding needs. It is clear that other options need to be considered. But a much better understanding of FAA's requirements for the next generation air traffic control system is also needed. The recent report to Congress by the Joint Program and Development Office was silent on complex implementation issues and how much funding will be needed, and when. This will be a central issue in discussions about how best to finance FAA and the shape, size, and direction of the Agency's capital needs for years.

That concludes my statement. I would be happy to answer any questions, Mr. Chairman.

[The prepared statement of Mr. Zinser follows:]

PREPARED STATEMENT OF TODD J. ZINSER, ACTING INSPECTOR GENERAL,
DEPARTMENT OF TRANSPORTATION

Mr. Chairman and Members of the Subcommittee:

We appreciate the opportunity to testify today regarding the Federal Aviation Administration's (FAA) Fiscal Year (FY) 2007 budget and the state of the Aviation Trust Fund. Financing FAA is one of the most important issues facing the Department, Congress, and the aviation industry. It is particularly important in light of the fact that the current FAA authorization—Vision 100—and the current ticket taxes expire in 2007.

Our office has an extensive body of work regarding cost control and financial issues within FAA. For example, in 1999 we reported that persistent cost growth in the agency's operating account was "crowding out" critical capital investments in air traffic modernization and capacity-enhancing projects within the existing revenue base. This is still a concern today.

First, it is important that we recognize that FAA oversees the safest aviation system in the world. Prior to December 2005, when a Southwest Airlines aircraft skidded off the runway at Chicago Midway and struck a car killing a child in the vehicle, there had not been a large commercial air carrier fatal accident in this country in 4 years. Notwithstanding that tragic accident, the United States has maintained a remarkable safety record considering the many changes occurring within the industry, including financial uncertainty and rebounding air traffic.

In terms of traffic, FAA estimates that between FY 2004 and FY 2005 domestic passenger enplanements have risen about 7 percent (from 628 million in 2004 to 670 million in 2005). FAA also estimates that international passenger enplanements have risen about 12 percent over this same time frame (from 61 million in 2004 to 69 million in 2005). By 2015, FAA estimates that 1 billion passengers will board planes (both domestically and internationally) each year.

Although traffic is up, network air carriers continue to suffer huge losses as a result of soaring fuel costs and their high cost structures. Last year, eight air carriers were in bankruptcy, which represented about 35 percent of available capacity. Today, four remain under bankruptcy protection, representing about 17 percent of available capacity. But all the network carriers continue to work aggressively to move away from high cost structures by reducing in-house staff, renegotiating labor agreements, and increasing the use of outside repair stations.

It is against this backdrop that we would like to discuss FAA's FY 2007 budget request. An important message of our testimony this morning, Mr. Chairman, is that FAA's FY 2007 budget primarily focuses on short-term requirements, such as sustaining existing systems and equipment.

The long-term initiatives to address future capacity and the funding mechanisms necessary to implement them have not yet been defined. That is a critical issue for this Subcommittee and FAA as deliberations begin concerning FAA's next reauthorization and alternative methods for financing FAA.

Today, I would like to focus on two issues:

- Progress and challenges within FAA's three major accounts—Operations, Facilities and Equipment (F&E), and the Airport Improvement Program (AIP), and
- Observations on the current funding mechanisms for FAA.

FAA's FY 2007 Budget Request

Like the air carriers, FAA is in a tough financial environment and, like most Federal agencies, is facing the realities of an austere budget environment. Over the past 4 years, FAA's overall budget has remained relatively flat—between \$13.7 billion and \$14.3 billion. For FY 2007, FAA is requesting \$13.7 billion, which is \$561 million less than last year's appropriation. However, there are significant differences in the distribution of FAA's FY 2007 budget request among the agency's various accounts. As shown in Table 1, the Operations account increased a little over 3 percent from last year's appropriations while the other 3 accounts were reduced. The F&E account is 2 percent less than last year, and the AIP account is almost 22 percent less than last year. Compared to the authorized levels in Vision 100, the budget request is \$1.48 billion less—primarily in the AIP and F&E accounts.

Table 1: Comparison of Recent FAA Enacted Budgets and FY 2007 Requested and Authorized Levels (\$ in millions)

	FY 2004	FY 2005	FY 2006	FY 2007 (request)	FY 2007 (authorized)
Operations	\$7,479	\$7,707	\$8,104	\$8,366	\$8,064
F&E	\$2,871	\$2,525	\$2,555	\$2,503	\$3,110
AIP	\$3,382	\$3,497	\$3,514	\$2,750	\$3,700
RE&D	\$119	\$130	\$137	\$130	\$356
Total	\$13,851	\$13,858	\$14,310	\$13,749	\$15,230

What we observed in 1999 continues to happen today. With FAA's overall budget remaining relatively flat, the increasing cost of FAA's operations continues to "crowd out" investments in FAA's capital and airport accounts. For example, between FY 2004 and FY 2007, FAA's overall budget decreased by about \$100 million. However, during that period, FAA's operating costs increased by \$887 million while FAA's F&E and AIP accounts were reduced by \$368 million and \$632 million, respectively.

Operations

FAA is requesting \$8.4 billion for its FY 2007 operating budget, which is about \$262 million above last year's enacted amount of \$8.1 billion. The Air Traffic Organization represents \$6.7 billion or nearly 80 percent of that request. The operations account is the largest portion of FAA's budget, representing nearly 61 percent of the agency's FY 2007 request, whereas FAA's capital and airport account represent 18 and 20 percent respectively.

Since FY 1996, the first year of personnel reform, FAA's operating costs have increased from \$4.6 billion to \$8.4 billion requested for FY 2007, an increase of over 80 percent. Controlling operating cost growth remains a significant challenge for FAA—one that Administrator Blakey and her staff have consistently demonstrated a clear commitment to addressing.

Progress This Past Year. We would like to point out two notable accomplishments FAA made this past year to better manage its operating cost growth. First, FAA completed the A-76 process for its flight service functions. On October 4, 2005, employees of 58 flight service stations transitioned from Government service to the contractor—Lockheed Martin. FAA estimates that outsourcing this function should save the agency more than \$1.7 billion over the next 10 years. We plan to begin a review of this transition later this year to ensure that services continue to meet user needs and that the estimated savings are being realized.

In August 2005, FAA also completed deployment of its labor distribution system, which is critical for getting a handle on the actual costs and productivity of the Air Traffic Organization's employees—FAA's largest workforce. Labor distribution is the process of associating labor cost directly with activities and services by requiring employees to record their time worked on specific activities. The system is a critical

component of FAA's cost accounting system, which was mandated by Congress in 1996.

Clearly, those efforts represent progress on the part of FAA toward its goal of becoming a performance-based and cost-driven organization. However, getting significant reductions in operating costs is difficult since over 70 percent of FAA's operating costs are made up of employee salary and benefits.

Some stakeholders, including FAA's own Management Advisory Committee, have advocated taking dramatic steps to reduce the agency's costs, such as consolidating numerous facilities throughout the country and increasing outsourcing efforts. But those are complicated and difficult undertakings that require the collaboration of FAA's many stakeholders and may be the subject of further discussions during deliberations over the next reauthorization.

Challenges This Coming Year. FAA faces several challenges this year that have implications for the agency's ability to live within its proposed FY 2007 operating budget. Those include completing negotiations for a new contract with controllers, addressing the expected surge in controller attrition, and maintaining a sufficient number of safety inspectors. FAA will also need to determine how to address the 1-percent Government-wide rescission for its FY 2006 appropriations.

- *Completing Negotiations Over a New Contract with Controllers.* A major challenge that FAA is currently facing is completing negotiations over a new collective bargaining agreement with the National Air Traffic Controllers Association (the union representing FAA's largest bargaining unit). A primary principle for FAA going into the negotiations was that it could not afford a new agreement similar to the existing agreement. According to FAA, the existing agreement cost the agency \$1.1 billion over the first 3 years of the contract. FAA has proposed several significant changes including hiring new controllers under a new pay system with pay bands that are less than the current pay system for controllers.

Formal negotiations began in July 2005 and as of March 10, 2006, the parties had either agreed to or withdrawn 121 of 152 articles. However, the remaining 31 unresolved articles are some of the most difficult issues, including pay, annual leave, and work rules. FAA and the union recently agreed to mediation and extended the latest round of talks. That is an encouraging sign.

There is a lot at stake. The outcome of the current negotiations has significant implications for FAA's future operating costs. It will also set the stage for labor/management relations between the agency and the union over the next several years. Clearly, it is in the best interest of all stakeholders to complete the negotiations.

- *Addressing the Expected Surge in Controller Attrition.* Another challenge facing FAA is the hiring and training of nearly 12,500 new controllers through FY 2014 as controllers hired after the 1981 strike begin retiring. In December 2004, FAA issued the first in what will be a series of annual reports outlining FAA's plans for addressing that challenge. In our opinion, the plan is a good first step in that it lays out the magnitude of the issue and establishes broad measures for meeting the challenge. However, as we reported in May 2005, subsequent reports will need further details about the plan in two key areas.

First, FAA's initial report did not identify how much the plan will cost to implement. The cost of hiring and training 12,500 new controllers will be substantial, particularly since it currently takes new controllers 2 to 5 years to become fully certified. During that time, FAA incurs the cost of the trainee's salary and benefits as well as the cost of the salary and benefits of the certified controllers who instruct them one-on-one. The outcome of the negotiations with the controllers union will have a significant impact on the costs of the plan as well.

Second, the plan does not address hiring and staffing needs by location. Without this information FAA cannot have confidence in the number of controllers it needs. That level of detail is critical because there are over 300 FAA-operated air traffic control facilities—many with significant differences in the levels of air traffic they manage and the complexity of operations they handle, which are factors used to set controller salaries at individual locations.

We recommended that FAA address these issues in its next report to Congress, and establish baseline metrics for numerous productivity gains it plans to achieve over the life of the 10-year plan. FAA agreed with our recommendations and expects to issue its next report in April.

Identifying ways to reduce the costs and time of hiring and training new controllers will be an ongoing and critical issue for FAA for years to come. FAA will need to consider all opportunities to improve its hiring and training process. For example, in December 2005, we reported that FAA could reduce the

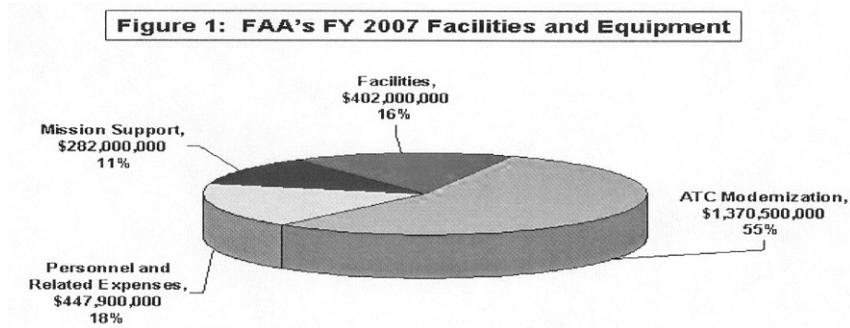
time and costs of training new controllers by making certain educational requirements a prerequisite for candidates before they are hired. FAA agreed with our recommendation to evaluate this concept and has convened a task force to study the feasibility, with an expected completion date of October 2006.

- *Maintaining a Sufficient Number of Safety Inspectors.* While replacing retiring controllers is a critical issue for FAA, it is also important to maintain a safety inspector workforce sufficient to achieve the agency's mission of safety oversight. In June we reported that while FAA has made progress in moving to a more risk-based approach to safety oversight, FAA inspectors could not effectively use the systems to monitor the rapidly occurring changes within the industry. In FY 2007, FAA's budget calls for an increase of 116 safety inspectors. However, it is unlikely that staffing gains over the next few years will be enough to offset the number of safety inspectors eligible to retire in coming years. For example, this year, 28 percent of the current inspector workforce (1,008 of 3,628) will be eligible to retire. By 2010, however, half of the safety inspector workforce (1,820 of 3,628) will be eligible to retire. In our opinion, until its risk-based approach to safety oversight is effectively targeting resources to the areas of greatest risk, FAA needs to carefully evaluate its inspector staffing levels to sustain sufficient oversight in light of the potential attrition within that workforce.
- *Addressing the FY 2006 Government-wide Rescission.* Another challenge facing FAA this year is the 1-percent Government-wide rescission for FY 2006. The rescission will require FAA to cut about \$82 million from its operating account. While the agency is still determining how to incorporate the cut, FAA has included a long list of possible reductions in its FY 2007 budget request. Those possible reductions include deferring seven new starts for contract towers until 2007, reducing training for technical workforces, reducing overtime, continuing attrition in non-safety staff positions, and reducing expenditures in infrastructure support and maintenance, among many others. However, FAA is also considering reducing the planned number of controllers and safety inspectors it plans to hire in 2006, which could affect safety or operational efficiency. For example, in the FY 2006 Conference Report on the Department's appropriations, Congress provided FAA with a \$12 million increase to fund additional safety inspectors. FAA has informed us that instead of increasing inspector staffing by 238 in FY 2006, it may only add 87. FAA needs to carefully evaluate this position given the changes in the industry and increased inspector workload demands. FAA is also considering reducing funding for various airspace redesign projects. As we noted in May 2005, airspace redesign efforts are important to enhance the flow of air traffic, reduce delays, and get the most benefits from new runways. FAA is still considering how it plans to address the cuts, but with the fiscal year now half over, decisions need to be made and articulated to Congress.

Facilities and Equipment

FAA's capital account—or the F&E account—is the principal vehicle for modernizing the National Airspace System. It represents about 18 percent of the agency's FY 2007 budget request. For FY 2007, FAA is requesting \$2.5 billion for the Facilities and Equipment account, which is \$50 million less than last year's appropriation. This is the fourth consecutive year that funding requests for the capital account are below authorized levels called for in Vision 100.

As illustrated in Figure 1, only about 55 percent of FAA's FY 2007 request for F&E (or \$1.4 billion) will actually go for acquiring air traffic control systems, the remainder will be spent on personnel, mission support, and facilities.



As we have noted in the past, the majority of FAA's capital account now goes for keeping things running (i.e., sustainment), not new initiatives. A review of the top 10 projects by dollar amount in the FY 2007 request shows that while some projects will form the platforms for future initiatives, the bulk of funds are requested for projects that have been delayed for years as well as efforts to improve or maintain FAA facilities or replace existing radars. Enclosure 1 provides information on the top 10 projects in FAA's FY 2007 budget request.

Over the last several years, FAA has deferred or cancelled a number of projects as funding for the capital account has remained essentially flat. This includes efforts for a new air-to-ground communication system, controller-pilot data link communications, and a new satellite-based precision landing system. FAA has also postponed making decisions on projects like the billion dollar *Standard Terminal Automation Replacement System*. These are some of the reasons why there is so much discussion about the next generation air traffic management system.

Notwithstanding a lack of clarity with respect to the cost and schedule of the next generation system, FAA is requesting F&E funds for two projects that are considered "building blocks" for the next generation system. These are not new programs per se and have been under development or been funded in previous budgets.

- *Automatic Dependent Surveillance-Broadcast (ADS-B)* is a satellite-based technology that allows aircraft to broadcast their position to others. In FY 2007, FAA is requesting \$80 million for this satellite-based technology. In prior budgets, ADS-B was funded under the *Safe Flight 21 initiative* which demonstrated the potential of ADS-B and cockpit displays in Alaska and the Ohio River Valley. FAA expects to make a decision about how quickly to implement ADS-B and at what cost later this year.
- *System Wide Information Management (SWIM)* is a new information architecture that will allow all airspace users to securely and seamlessly access a wide range of information on the status of the National Airspace System and weather conditions. It is analogous to an Internet system for all airspace users. FAA is requesting \$24 million for this program in FY 2007.

Progress and Challenges with Key Air Traffic Control Modernization Projects. We are not seeing the massive cost growth and schedule delays we have seen with FAA major acquisitions in the past. This is due to this Administration's efforts to take a more incremental approach to major acquisitions and decisions to defer several complex and challenging efforts. Last year, we reported that 11 of 16 major acquisitions accounted for a cost growth of \$5.6 billion.¹ Most of this cost growth occurred before the establishment of the Air Traffic Organization. It was also a reflection of efforts to re-baseline programs, which identified costs that had been pent up for years, and not reflected in prior cost estimates.

Many efforts are maturing and completing them within existing cost and schedule parameters is critical to allow room for future initiatives. Only one initiative, *FAA Telecommunications Infrastructure*, has the potential to reduce FAA's operating costs which is a top priority within the agency. There are a number of programs that require attention.

- *En Route Automation Modernization (ERAM)* is intended to replace the Host computer network—the central nervous system for facilities that manage high-

¹ OIG Report Number AV-2005-061, "Report on the Status of FAA's Major Acquisitions: Cost Growth and Schedule Delays Continue to Stall Air Traffic Modernization," May 26, 2005. OIG reports and testimonies can be found on our website: www.oig.dot.gov.

altitude traffic. FAA is requesting \$375.7 million for ERAM, which is this program's peak single year funding level according to FAA's Capital Investment Plan. With an acquisition cost of \$2.1 billion, this program continues to be one of the most expensive and complex acquisitions in FAA's modernization portfolio. The monthly burn rate for ERAM will increase from \$28 million a month in FY 2006 to \$31 million per month in FY 2007. This year is critical for ERAM because the system is scheduled to come out of the lab environment and begin real world testing. Cost increases or schedule slips with ERAM will have a cascading impact on other capital programs and directly affect the pace of efforts to transition to the next generation system.

- *FAA Telecommunications Infrastructure (FTI).* FAA is requesting \$28 million for its effort to replace its entire telecommunications system for air traffic control. In a recently issued draft report to FAA, we concluded that FTI is a high-risk program—with a lifecycle cost estimate of \$2.4 billion (\$310 million estimated acquisition costs and \$2.1 billion estimated operations costs) through 2017—five years longer than originally planned. We also concluded that FAA is unlikely to meet its December 2007 revised completion date. In fact, only months after being re-baselined in December 2004, the program began falling behind its site acceptance schedule (which is primarily the installation of FTI equipment) and has not recovered.

After site acceptance, three other critical steps are required to transition FTI services into the NAS and begin achieving cost savings. FTI is not likely to be completed on time because FAA has not developed a detailed, realistic master schedule for all critical steps, including identifying when each service will be accepted, when services will be cut over to FTI, and when existing (legacy) services will be disconnected. Further, until FAA develops a realistic master schedule, it will be difficult to obtain a binding commitment from the FTI contractor to complete the transition by December 2007.

Because the primary purpose of the FTI program is to lower operating costs, which depend on deploying the system on schedule, expected benefits from reducing operating costs are eroding. For example, FAA did not realize \$32.6 million in reduced operating costs in FY 2005 that it expected due to the limited progress made in disconnecting legacy circuits. Additionally, unless FAA accelerates FTI service cutover and legacy circuit disconnect rates substantially (almost 10-fold over FY 2005), the agency will not realize about \$102 million in estimated cost savings for FY 2006.

- *Advanced Technologies and Oceanic Procedures (ATOP).* FAA is requesting \$31.3 million for ATOP. ATOP is a new automated system for managing oceanic air travel. FAA is now using ATOP in New York and Oakland full time, and Anchorage began initial operations earlier this month. Experience thus far indicates that ATOP can reduce flight times and has significant productivity benefits for controllers. We note that software development for ATOP has proven far more difficult and time-consuming than expected. FAA has increased the value of the fixed-price contract several times to keep the effort on schedule and is using more non-fixed-price elements of the contract, which are at higher rates than what was established at contract award. FAA needs to establish metrics for ATOP's productivity enhancements that will help the agency determine how many controllers it needs at facilities that manage oceanic traffic.

- *Terminal Modernization and Aging Displays.* The cost to complete terminal modernization remains an unknown, long standing issue. FAA is now requesting \$93.5 million for terminal automation in FY 2007. Facing cost growth of over \$2 billion for the *Standard Terminal Automation Replacement System* (STARS), FAA changed its approach to terminal modernization and created a new effort, called *Terminal Automation Modernization/Replacement* (TAMR). Based on TAMR results, FAA decided to upgrade the displays at four sites and replace the entire system at five small sites. This leaves over 100 sites that still need modernization.

Of particular concern is the replacement of aging displays at four large terminal sites, such as Chicago and Denver. As we noted in November 2004, recurrent problems with the aging displays have safety implications. FAA decided to award a competitive contract to replace the displays. FAA has not yet issued the proposal to replace these displays, but expects to complete this effort by 2008 and is exploring ways to expedite the deployment.

FAA Must Strengthen Controls Over Support Service Contracts. FAA needs to strengthen its controls over its support service contracts to eliminate overspending and ensure that quality services are being procured. In FY 2005, FAA invested about \$750 million in F&E funds for acquiring support services. About \$300 million

of these services were obtained under three multiple-award “umbrella” procurement programs, under which companies are pre-qualified to perform individual tasks. We reviewed one of these procurement programs and found that it was not meeting FAA’s needs for rapid acquisitions, quality services, or fair prices. We found the agreement was not structured to take advantage of innovative procurement techniques and contained no incentives for suppliers to save costs.

Contracts awarded under this program were also poorly managed. For example, 87 of the 114 contracts awarded under the agreement were either sole-sourced or based on one bid. Our review of 10 sample contracts found that if all options were exercised, FAA would have spent at least \$12 million and possibly up to \$22 million more on these contracts alone than if it acquired these same services through one of FAA’s other contracting vehicles.

FAA agreed with our recommendation to terminate the program and is in the process of implementing corrective actions to strengthen its controls over support service contracts. The Administrator has issued instructions that FAA take a fundamental look at its controls to avoid unnecessary payments for these services. New controls are being added, including amending policies to require competitive bidding on all support service contracts of \$1 million or more and requiring the Deputy Administrator’s approval before allowing awards with fewer than three bids.

Clearly, these are steps in the right direction—the key now is follow through. Moreover, given the current budget environment, we believe that better management of support service contracts represents an important area for potential savings.

The Joint Program and Development Office and the Next Generation Air Traffic Management System. Major questions facing the Congress and the aviation community focus on how quickly and at what cost FAA can transition to the next generation air traffic management system to meet the forecasted demand for air travel. FAA’s Joint Program and Development Office (JPDO) was mandated by Congress to develop a vision for the next generation air traffic management system and align the research efforts of several Federal agencies. FAA is requesting \$18 million specifically for the JPDO through the Agency’s Research, Engineering, and Development account.

The capital requirements and timeframes for implementing the next generation system remain unknown. Although the JPDO recently provided a progress report to the Congress, it was silent on complex implementation issues about how much funding will be needed and when. We understand that FAA plans to convene workshops with industry to help determine the requirements and cost of the next generation system. This will be a central issue in the discussion about how best to finance FAA and the shape, size, and direction of the capital program for the next decade. Also, to move forward FAA will have to decide what modifications to existing efforts are needed and which ones need to be accelerated or cancelled.

Airport Improvement Program

After several years of funding increases for AIP, FAA is proposing a reduction in AIP funding for the second year in a row. FAA’s FY 2007 request of \$2.7 billion is \$764 million less than last year’s appropriation and nearly \$1 billion less than called for in Vision 100. FAA’s FY 2007 budget request results in a 23 percent reduction in airport grants from last year’s appropriation. The bulk of the planned reductions (\$624 million) will occur in “formula” grants as illustrated in Table 2.

Table 2: Reduction in AIP Formula Grants FY 2006 versus FY 2007 (\$ in Thousands)

	FY 2006 Enacted	FY 2007 Estimate	\$ Reduction	% Reduction
Primary Airports	\$887,980	\$496,000	\$391,980	44.1
Cargo Service Airports	\$119,851	\$92,651	\$27,200	22.7
Alaska Airports	\$21,345	\$10,673	\$10,672	50.0
States (General Aviation)	\$684,863	\$489,724	\$195,139	28.5

The significant reduction to those grants occurs because of special provisions of FAA’s current authorization. Those provisions require that whenever AIP funding is \$3.2 billion or more, as has been the case in recent years, grant funding levels were calculated based on the individual formula and that amount was then doubled. However, since this year’s request is less than \$3.2 billion, grant funding levels are calculated based on the formula alone and are not doubled.

With the decrease in available AIP funds, FAA needs to better manage airport grants. One area we examined was how airports disposed of land acquired for noise

mitigation purposes. Based on a review of 11 airports, we found that FAA could recover an estimated \$242 million for the Trust Fund or for other noise mitigation projects with improved oversight of noise land and its disposal. Each of the 11 airports in our review had AIP-funded noise land, ranging from nominal acreage at several airports to hundreds of acres at others, that either was no longer required for noise compatibility purposes or did not have a documented need for airport development. Given the current budget environment, we believe this is another area for potential savings.

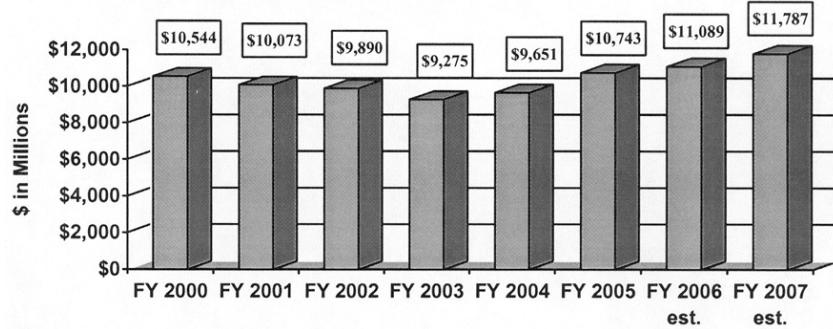
In addition to AIP funds, 326 of the larger U.S. airports collect passenger facility charges (PFCs) to finance capital projects. FAA estimates that airports will collect \$2.5 billion in PFCs during 2006. Currently, PFCs are capped at \$4.50 per segment of flight (a maximum of \$18.00 on a round trip). The current cap on PFCs is an important matter for this Committee and has significant implications for major airport's capital expenditure plans. For example, one major airport—Chicago O'Hare—based part of its financing plan for expanding the airport on a PFC increase from the current maximum of \$4.50 to \$6.00 per segment. How airport projects are funded and the level of the PFC charge will be important issues as the Congress decides how to best finance FAA.

Observations on FAA's Current Funding Mechanisms

The Airport and Airway Trust Fund was created in 1970 to provide a dedicated revenue source for funding aviation programs. Initially envisioned as a means to fund the infrastructure and modernization needs of the National Airspace System, the Trust Fund also pays for large portions of FAA's operating budget and for one time items such as security funding after the September 11th attacks.

After several years of decline, Trust Fund revenues are increasing and now exceed pre-September 11th levels. As shown in Figure 2, in FY 2005 the Trust Fund collected \$10.7 billion in revenue, the second consecutive year Trust Fund revenues have increased. FAA estimates that revenues will increase to \$11.1 billion in FY 2006 and \$11.8 billion in FY 2007.

Figure 2: Airport and Airway Trust Fund Revenues



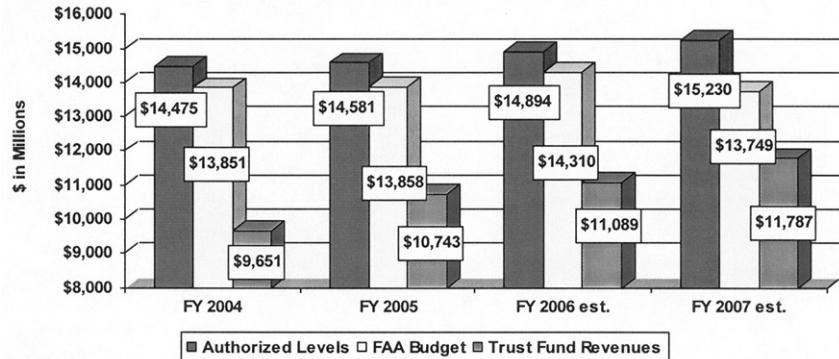
There are several reasons for this increase. First, airfares are slowly rising. According to the Air Transportation Association, the average cost of a ticket for a 1,000-mile flight increased from \$108.70 in September 2004 to \$117.90 in September 2005, an increase of over 8 percent. In addition, the number of people flying has increased substantially over the past year. In its recently released aviation forecast, FAA estimates that domestic passenger enplanements rose an estimated 7 percent between FY 2004 and FY 2005, and international passenger enplanements have risen an estimated 12 percent over this same time frame.

These changes have resulted in more passengers paying higher airfares, increasing collections of the 7.5 percent ticket tax. FAA estimates that collections of this tax rose from \$4.6 billion in FY 2004 to \$5.0 billion in FY 2005. In addition, increasing domestic and international passenger traffic have resulted in higher segment and international tax collections. FAA estimates that segment tax collections rose from \$1.7 billion in FY 2004 to \$1.9 billion in FY 2005, while international tax collections rose from an estimated \$1.4 billion in FY 2004 to an estimated \$1.8 billion in FY 2005.

Even though Trust Fund revenues are returning to levels seen in FY 2000, they have not kept pace with FAA's budget. For FY 2007, FAA's budget request exceeds projected Trust Fund revenues by nearly \$2 billion. In addition, FAA's current 4-year authorization (Vision 100) calls for higher funding levels of modernization

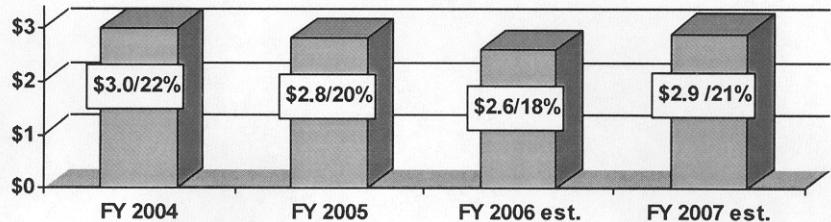
projects than has been enacted in recent years. These authorized levels are also significantly higher than Trust Fund revenues. As shown in Figure 3, FAA's authorized spending level for FY 2007 is more than \$3.4 billion higher than projected Trust Fund revenues.

Figure 3 : Comparison of FAA Authorized Levels and Budgets and Airport and Airway Trust Fund Revenues



General Fund Contribution. Historically, the General Fund has been used to make-up some of the difference between Trust Fund revenues and FAA's budget and many would argue that it is appropriate for the General Fund to play a part in funding FAA. As shown in Figure 4, FAA estimates that the General Fund will contribute \$2.9 billion toward FAA's FY 2007 total budget, or about 21 percent of the request. This amount is similar to what has been contributed in the previous three FAA budgets.

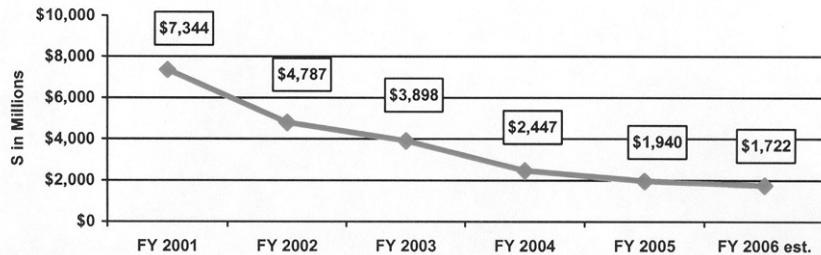
Figure 4: General Fund Contributions Toward FAA's Budget (\$ in Billions)



However, the Federal Government is operating in a deficit environment and is seeking ways to reduce discretionary spending. This year's 1-percent across-the-board spending reduction is a result of this environment, and FAA may not be able to rely on the General Fund to subsidize larger parts of its budget not covered by the Trust Fund.

Uncommitted Balance of the Trust Fund. In the past, differences between FAA's budget and the Trust Fund revenues and General Fund contribution have been made up by drawing down the Trust Fund's uncommitted balance. But those actions have depleted that balance. As shown in Figure 5, between the end of FY 2001 and the end of FY 2006, the uncommitted balance of the Trust Fund has gone from \$7.3 billion to a projected \$1.7 billion. Over the next several years, using the uncommitted balance of the Trust Fund to make up differences between the Trust Fund revenues and General Fund contributions may no longer be a viable option as a stop-gap measure. The low uncommitted balance would also provide no buffer for FAA's budget should the excise taxes lapse, as was the case in 1997.

Figure 5: Airport and Airway Trust Fund Uncommitted Balance at the End of the Fiscal Year



As we face the next reauthorization, it is clear that other options need to be considered. Both Secretary Mineta and Administrator Blakey have begun discussions with FAA's stakeholders about alternative methods for financing FAA. However, as discussions regarding the next reauthorization begin, a much better understanding of FAA's requirements for the next generation air traffic control system is needed. Although FAA's JPDO recently provided a progress report to Congress, it was silent on complex implementation issues and how much funding will be needed and when. This will be a central issue in discussions about how best to finance FAA and the shape, size, and direction of FAA's capital needs for the next decade.

That concludes my statement. I would be happy to answer any questions that you or other members of the Committee might have.

ENCLOSURE 1

Fiscal Year 2007 10 Largest F&E Projects

Project	FY 07 Request (\$ in Millions)	Comments
ERAM	\$375.7	En Route Automation Modernization: Replaces the Host computer hardware and software, including the Host back-up system and associated support infrastructure at 20 air route traffic control centers.
Terminal ATC Facilities Replacement	\$124.0	The air traffic control towers (ATCT) and terminal radar approach control (TRACON) facilities that cannot meet present day requirements are being identified for replacement. The proposed list of projects for FY 2007 will be based on FAA's Facilities Master Plan for infrastructure replacement and improvement.
WAAS	\$122.4	Wide Area Augmentation System: Provides the augmentation needed to make the GPS satellite signal fully usable for en route, terminal and non-precision approaches. We note that WAAS will primarily benefit general aviation users because commercial airliners already have on-board capabilities similar to WAAS.
ADS-B National Implementation	\$80.0	Automatic Dependent Surveillance-Broadcast: An air-to-air/air-to-ground communications, navigation, and surveillance technology that relies on GPS to broadcast the positions of properly equipped aircraft and surface vehicles.
TFM-Infrastructure Modernization	\$78.9	The Traffic Flow Management (TFM) system provides direct mission support to FAA by ensuring efficient flow of air traffic through the National Airspace System.
ASDE-X	\$63.6	Airport Surface Detection Equipment-Model X: Provides surveillance equipment to help prevent runway incursions at airports.
ARTCC Modernization	\$51.0	Part of FAA's continued efforts to modernize and sustain the 21 Air Route Traffic Control Centers (ARTCC), and the San Juan and Guam Combined Center Radar Approach Control facilities in order to minimize delays or outages caused by infrastructure failure.

Fiscal Year 2007 10 Largest F&E Projects—Continued

Project	FY 07 Request (\$ in Millions)	Comments
Terminal Modernization and Aging Displays	\$93.5	Standard Terminal Automation Replacement System (STARS): Replaces controller and maintenance workstations with color displays, processors, and computer software at terminal air traffic control facilities. Facing cost growth with STARS, FAA changed its approach to terminal modernization limiting STARS deployments to analyze its options beyond the initial deployment phase for STARS and created a new effort called Terminal Automation Modernization/Replacement (TAMR).
Airport Traffic Control Tower/ TRACON Facilities-Improvements	\$44.2	To upgrade and improve aging ATCT/TRACON facilities and equipment to provide an acceptable level of service and to meet current and future operational requirements. This program also improves the capability of facilities to withstand a seismic event in accordance with FEMA and DOT directives.
ASR-11, ASR-7 & 8 Replacement	\$44.1	Airport Surveillance Radar-11: Replaces aging analog radar with digital radar at small terminal facilities.
Total	\$1,077.4	

ENCLOSURE 2

Related Office of Inspector General Reports 1998–2005*Operations*

FAA Has Opportunities To Reduce Academy Training Time and Costs by Increasing Educational Requirements for Newly Hired Air Traffic Controllers—AV-2006-021, December 7, 2005

Audit of the Management of Land Acquired Under Airport Noise Compatibility Programs—AV-2005-078, September 30, 2005

Chicago's O'Hare Modernization Program—AV-2005-067, July 21, 2005

Report on Controller Staffing : Observations on FAA's 10-Year Strategy for the Air Traffic Controller Workforce—AV-2005-060, May 26, 2005

Airspace Redesign Efforts Are Critical To Enhance Capacity but Need Major Improvements—AV-2005-059, May 13, 2005

FAA Administration and Oversight of Regionally Issued Contracts—AV-2004-094, September 28, 2004

FAA's Actions To Address Leave and Overtime Abuse at Five Locations—AV-2004-081, September 9, 2004

Short- and Long-term Efforts to Mitigate Flight Delays and Congestion—CR-2004-066, June 17, 2004

Opportunities To Improve FAA's Process for Placing and Training Air Traffic Controllers in Light of Pending Retirements—AV-2004-060, June 2, 2004

Using CRU-X To Capture Official Time Spent on Representational Activities—AV-2004-033, February 13, 2004

FAA's Management of Memorandums of Understanding with the National Air Traffic Controllers Association—AV-2003-059, September 12, 2003

Safety, Cost and Operational Metrics of the Federal Aviation Administration's Visual Flight Rule Towers—AV-2003-057, September 4, 2003

FAA's Oversight of Workers' Compensation Claims in Air Traffic Services—AV-2003-011, January 17, 2003

FAA's National Airspace System Implementation Support Contract—AV-2003-002, November 15, 2002

FAA's Air Traffic Services' Policy of Granting Time Off Work To Settle Grievances—CC-2002-048, December 14, 2001

Automated Flight Service Stations: Significant Benefits Could be Realized by Consolidating AFSS Sites in Conjunction with Deployment of OASIS—AV-2002-064, December 7, 2001

Compensation Issues Concerning Air Traffic Managers, Supervisors, and Specialists—AV-2001-064, June 15, 2001

Technical Support Services Contract: Better Management Oversight and Sound Business Practices Are Needed—AV-2000-127, September 28, 2000

Contract Towers: Observations on FAA's Study of Expanding the Program—AV-2000-079, April 12, 2000

Staffing: Supervisory Reductions Will Require Enhancements in FAA's Controller-in-Charge Policy—AV-1999-020, November 16, 1998

Personnel Reform: Recent Actions Represent Progress but Further Effort Is Needed To Achieve Comprehensive Change—AV-1998-214, September 30, 1998

Acquisition and Modernization

FAA's En Route Modernization Program Is On Schedule But Steps Can Be Taken to Reduce Future Risks—AV-2005-066, June 30, 2005

Status of FAA's Major Acquisitions: Cost Growth and Schedule Delays Continue To Stall Air Traffic Modernization—AV-2005-061, May 26, 2005

Report on Terminal Modernization: FAA Needs To Address Its Small, Medium, and Large Sites Based on Cost, Time, and Capability—AV-2005-016, November 23, 2004

Observations on FAA's Controller-Pilot Data Link Communications Program—AV-2004-101, September 30, 2004

FAA's Advanced Technologies and Oceanic Procedures—AV-2004-037, March 31, 2004

FAA Needs To Reevaluate STARS Costs and Consider Other Alternatives—AV-2003-058, September 10, 2003

Status of FAA's Major Acquisitions—AV-2003-045, June 27, 2003

Integrated Terminal Weather System: Important Decisions Must Be Made on the Deployment Strategy—AV-2003-009, December 20, 2002

FAA's Progress in Developing and Deploying the Local Area Augmentation System—AV-2003-006, December 18, 2002

Follow-up Memo to FAA on STARS Acquisition—CC-2002-087, June 3, 2002

Letter Response to Senator Richard Shelby on FAA's Advanced Technologies and Oceanic Procedures (ATOP)—CC-2001-210, April 12, 2002

Status Report on the Standard Terminal Automation Replacement System—AV-2001-067, July 3, 2001

Efforts to Develop and Deploy the Standard Terminal Automation Replacement System—AV-2001-048, March 30, 2001

Aviation Safety

Review of Air Carriers' Use of Non-Certified Repair Facilities—AV-2006-031, December 15, 2005

FAA Safety Oversight of an Air Carrier Industry in Transition—AV-2005-062, June 3, 2005

Report on New Approaches Needed in Managing FAA's Hazardous Materials Program Federal Aviation Administration—SC-2005-015, November 19, 2004

Report on FAA Controls Over the Reporting of Operational Errors—AV-2004-085, September 20, 2004

Review of Air Carriers' Use of Aircraft Repair Stations—AV-2003-047, July 8, 2003

Operational Errors and Runway Incursions—AV-2003-040, April 3, 2003

Air Transportation Oversight System (ATOS)—AV-2002-088, April 8, 2002

Oversight of FAA's Aircraft Maintenance, Continuing Analysis, and Surveillance Systems—AV-2002-066, December 12, 2001

Further Delays in Implementing Occupational Safety and Health Standards for Flight Attendants Are Likely—AV-2001-102, September 26, 2001

Despite Significant Management Focus, Further Actions Are Needed To Reduce Runway Incursions—AV-2001-066, June 26, 2001

These reports can be reviewed on the OIG website at <http://www.oig.dot.gov>.

Senator BURNS. Thank you very much.

Now we'll hear a statement from Dr. Gerald Dillingham, director of physical infrastructure for the GAO. And thank you for coming this morning.

**STATEMENT OF GERALD L. DILLINGHAM, PH.D., DIRECTOR,
PHYSICAL INFRASTRUCTURE ISSUES, U.S. GOVERNMENT
ACCOUNTABILITY OFFICE**

Dr. DILLINGHAM. Thank you, Chairman Burns, Chairman Stevens, Senator Pryor.

My testimony this morning is in response to your request that the GAO undertake an analysis of the financial viability of the Aviation Trust Fund to support FAA's budget request under Vision 100 authorization and the President's 2007 budget proposal. Historically, annual revenues going into the Trust Fund have fluctuated, but generally they have exceeded the amount appropriated from the Trust Fund for FAA's budget. However, for each of the past 5 years, Trust Fund revenues have been below the level forecasted by FAA. As a result, the uncommitted balance of the Trust Fund has been used to substitute for the revenues that were forecasted, but did not materialize, to fund the FAA. This has caused the uncommitted balance to decline. By the end of 2006, we expect that the uncommitted balance will have declined by about \$5.6 billion, or 77 percent, since FY 2001. This trend of declining Trust Fund balances is particularly important if actual revenues are lower than forecasted revenues due to unforeseen events, such as another 9/11 terrorist attack, a pandemic, or even a lapse in the aviation taxes. If there is a revenue shortfall and there is no uncommitted balance, either FAA would have to reduce spending or Congress would have to appropriate additional money from the General Fund.

Our work shows that if Congress continues to follow the Vision 100 formula for FY 2007, there will be little change in the uncommitted balance, which is forecasted to be about \$1.7 billion at the end of this year. If, instead, Congress adopted the President's budget proposal for 2007, the fund's uncommitted balance is expected to rise to about \$2.7 billion. This higher uncommitted balance would occur, because the President's budget calls for an appropriation from the Trust Fund which is about a billion dollars less than under Vision 100. The largest share of this spending reduction comes from the AIP program.

Mr. Chairman, I want to underline the fact that these Trust Fund projections are very much dependent upon achieving forecasted traffic levels and airfares. We note, however, that in each of the last 5 years, FAA has overestimated the revenues expected to go into the Trust Fund. During 2003 and 2004, the actual revenues fell short of forecasted revenues by almost a billion dollars each year.

Mr. Chairman, as the Administrator said in her statement, we recognize that one of the difficulties in making more accurate forecasts is because when FAA makes the forecast that's contained in the President's budget, it is based on information available in the first quarter of the preceding year. To take this possibility of revenue shortfalls into account, we conducted a sensitivity analysis in which we examined the viability of the Trust Fund assuming 5 and

10 percent less than forecasted tax revenues. The results of that analysis shows that if the revenues are 5 percent lower than the projected levels for both 2006 and 2007, the Trust Fund's uncommitted balance would fall to less than \$1 billion dollars under both the President's proposal and the Vision 100 authorization by the end of FY 2007. If revenues are 10 percent lower than projected for those 2 years, the uncommitted balance would reach zero by the end of FY 2007 under Vision 100, and about \$500 million under the President's budget proposal.

The question that remains is how revenues beyond 2007 compare with projected costs for the development, operation, and maintenance of the Nation's ATC system. As has been pointed out by the previous witnesses, FAA will incur significant costs to maintain and modernize the current ATC system and create the infrastructure that will be the basis of the next generation air traffic control system.

Mr. Chairman, we believe that the discussion about how to fund FAA beyond 2007 must focus not only on providing a funding regime in which revenues are better aligned with FAA costs, the discussion should also focus on cost control, air traffic facilities, and regional office consolidation, as well as continuing improvement in the FAA's management of operations.

At the request of this Committee, we are currently examining a variety of potential funding options and a range of possible cost-saving opportunities. We expect to report to you on these analyses in the coming months.

Thank you, Mr. Chairman.

[The prepared statement of Dr. Dillingham follows:]

PREPARED STATEMENT OF GERALD L. DILLINGHAM, PH.D., DIRECTOR, PHYSICAL INFRASTRUCTURE ISSUES, U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Mr. Chairman and Members of the Subcommittee:

We are pleased to be here today to discuss the financial viability of the Airport and Airway Trust Fund (Trust Fund) and the President's proposed 2007 budget for the Federal Aviation Administration (FAA). Over the course of FAA's last two authorizations, FAA's appropriations increased from \$9.8 billion in Fiscal Year 1999 to \$14.3 billion this Fiscal Year (2006), and Fiscal Year 2007 is projected to be \$15.2 billion.¹ In this testimony, we will present the results of our analysis of the uncommitted balance² of the Trust Fund and related issues as requested by this Committee.

FAA is currently funded by a combination of Trust Fund revenues derived from excise taxes levied on a variety of aviation activities and from General Fund revenues. The Trust Fund's uncommitted balance depends on the revenues flowing into the fund and the appropriations made available from the fund for various spending accounts. Policy choices, structural changes in the aviation industry, and external events have affected revenues flowing into and out of the fund. For example, the uncommitted balance has been declining in recent years because Trust Fund revenues for the last 5 years have been less than FAA's forecasted levels. Our analysis includes scenarios in which Trust Fund revenues continue to fall short of forecasted levels. Under these scenarios, the Trust Fund balance continues to decline, and in one scenario, the balance reaches zero by the end of 2007. We believe these scenarios raise concerns because in the past the Trust Fund's uncommitted balance was used to offset lower-than-expected Trust Fund revenues and decreased General Fund contributions. FAA could help address these concerns by continuing to look for ways to improve efficiency and reduce costs. However, the zero-balance scenario

¹ Unless otherwise specified, all dollar amounts in this testimony are in nominal dollars and all data discussed and presented are on a fiscal year basis.

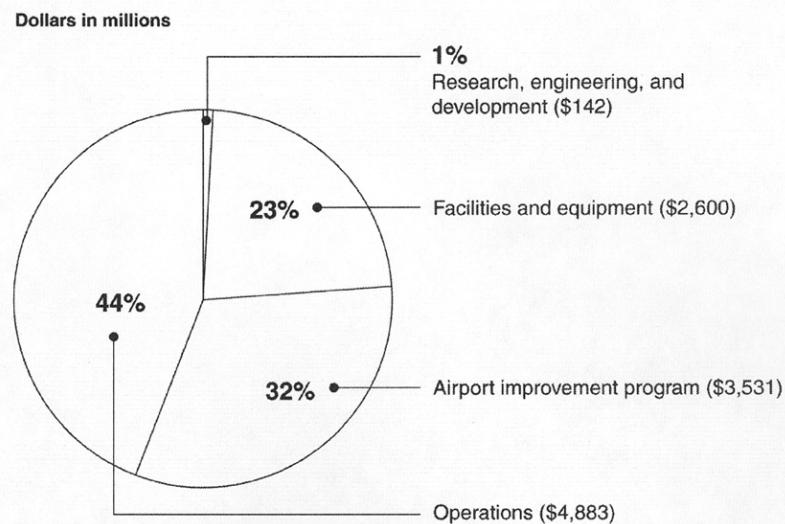
² The Trust Fund's uncommitted balance represents money against which there is no outstanding budget commitment or budget authority to spend.

would most likely have implications for the Congress in funding FAA programs. In addition, we believe that the information about the financial viability of the Trust Fund will be critical to congressional decision making regarding appropriations for FAA's 2007 budget.

The Trust Fund was established by the Airport and Airway Revenue Act of 1970 (Pub. L. 91-258) to help fund the development of a nationwide airport and airway system and to fund investments in air traffic control facilities.

It provides all of the funding for FAA's capital accounts, including: the Airport Improvement Program (AIP), which provides grants for construction and safety projects at airports; the Facilities and Equipment (F&E) account, which funds technological improvements to the air traffic control system; and the Research, Engineering, and Development (RE&D) account, which funds continued research on aviation safety, mobility, and environment issues as well as the FAA's portion of the Joint Planning and Development Office. In addition, at various times during its history, the Trust Fund has funded all or some portion of FAA's operations. In 2005, expenditures from the Trust Fund were made among the four accounts shown in figure 1.

Figure 1: Expenditures from the Trust Fund for Fiscal Year 2005 Total \$11,156 Million



Source: GAO analysis of FAA data.

To fund these accounts, the Trust Fund is credited with revenues from a variety of excise taxes related to passenger tickets, passenger flight segments, international arrivals/departures, cargo waybills, and aviation fuels. These taxes are scheduled to expire at the end of 2007. Including interest earned on its balances, the Trust Fund received \$10.8 billion in 2005. Table 1 shows the distribution of Trust Fund revenues for 2005 by source.

Table 1: Sources of Trust Fund Revenue, Fiscal Year 2005 (Dollars in millions)

Revenue source	Amount	Percent
Passenger ticket tax	\$5,161	48
Passenger flight segment tax	1,900	18
Cargo tax	461	4
Fuel tax	971	9
International departure/arrival tax	1,922	18
Interest	440	4
Refunds *	(101)	(1)

Table 1: Sources of Trust Fund Revenue, Fiscal Year 2005 (Dollars in millions)—
Continued

Revenue source	Amount	Percent
Total	\$10,754	100

Source: GAO analysis of FAA data.

*Refunds include: refund of aviation fuel other than gas (noncommercial), refund of aviation gasoline (non-commercial), and other refunds/credits.

Although expenditures from the Trust Fund exceeded revenues in 2005, since the Trust Fund's creation in 1970, revenues have in aggregate exceeded spending commitments, resulting in a surplus or an uncommitted balance. At the end of 2005, the Trust Fund's uncommitted balance was about \$1.9 billion.

Policy choices, structural changes in the aviation industry, and external events have affected revenues flowing into and out of the fund and have caused some aviation stakeholders to speculate about the fund's financial status. Some aviation stakeholders have said that there is a reason to be concerned about the financial condition of the Trust Fund because in recent years, revenues have not kept pace with funding commitments and the uncommitted balance has been used to close the gap. Other aviation stakeholders state that the fund is healthy because revenues are currently increasing and are expected to continue to increase.

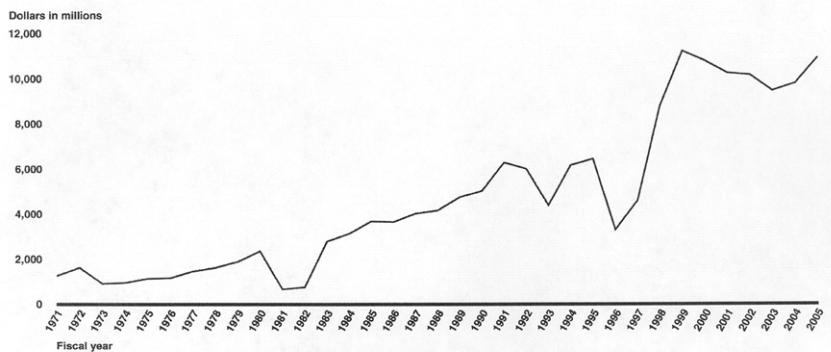
The focus today is the Trust Fund's revenues and balances over the past few years; the projected near-term future of the Trust Fund, considering the President's 2007 budget request for FAA; and policy decisions that may affect longer-term Trust Fund balances. The scope of our work and the specific methodology are discussed at the end of my statement.

Recent Trends of the Trust Fund and the Effect on the Fund's Uncommitted Balance

Revenues Have Generally Increased with Some Fluctuations

The Trust Fund's uncommitted balance depends on the revenues flowing into the fund and the appropriations made available from the fund for various spending accounts. The amount of revenue flowing into the Trust Fund has fluctuated from year to year but has generally trended upward, as shown in figure 2. Some of the fluctuation has resulted from changes in economic conditions, but some has been due to other factors. For example, during 1981 and 1982, revenues (including interest) flowing into the fund averaged about \$629 million—the lowest amount in the fund's history—because of a lapse in the collection of aviation taxes. In 1999, revenue flowing into the fund totaled about \$11.1 billion, the largest amount in the fund's history.

Figure 2: Trust Fund Revenues Have Fluctuated but Generally Increased



Source: GAO analysis of Congressional Budget Office data and FAA budgets.

Note: Trust revenues include interest earned.

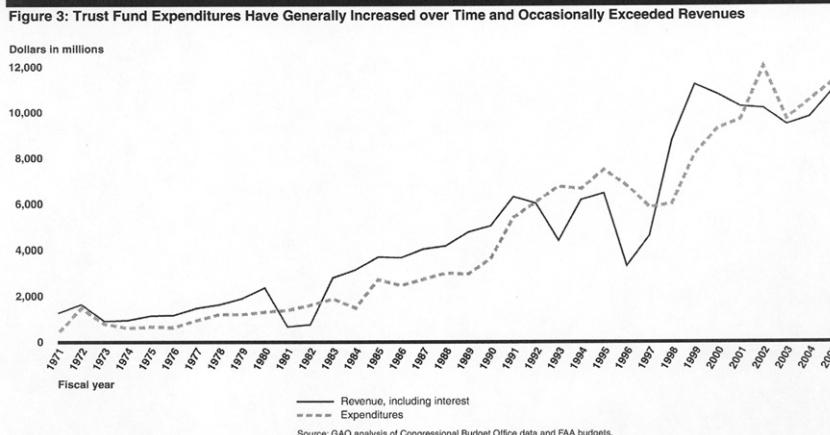
However, after revenues peaked in 1999, the amount of revenue flowing into the Trust Fund decreased in each of the next 4 years, reaching a level of about \$9.3 billion in 2003. A number of factors contributed to this decrease. For example, within the airline industry, the growth of the Internet as a means to sell and distribute

tickets, the growth of low-cost airlines, and fare reductions by legacy carriers³ all transformed the industry and led to lower average fares. These lower fares have resulted in lower ticket taxes and less revenue going into the Trust Fund. In addition, in the same time period, a series of largely unforeseen events, including the September 11, 2001, terrorist attacks, war in Iraq and associated security concerns, the Severe Acute Respiratory Syndrome (SARS), and global recessions seriously affected demand for air travel, resulting in a decrease in airline industry and Trust Fund revenue.

Since the beginning of 2004, however, Trust Fund revenues have been increasing. In fact, revenues from tax sources in 2005 were nearly as high as in 1999, although total revenues were still below peak level because less interest was earned due to a lower Trust Fund balance.

Expenditures from the Trust Fund Have Also Generally Increased

Similar to the revenue picture, the annual amount of expenditures from the Trust Fund also has generally increased since the fund's inception, but with some fluctuation. One source of fluctuation has been that the share of FAA operations paid by the Trust Fund has varied over time.⁴ Figure 3 shows how expenditures from the fund have changed over time and how they have compared with revenues. In some years, they have exceeded revenues, but in other years they have been less than revenues.



Appropriations from Trust Fund Are Now Linked to Projected Revenues

In the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (AIR-21), the Congress created a link between Trust Fund revenues and appropriations from the fund to try to ensure that all fund receipts, including interest, were committed to spending for aviation purposes on an annual basis. According to a provision of AIR-21, which was continued in the Century of Aviation Reauthorization Act (Vision 100)—FAA's current authorizing legislation—total appropriations made available from the fund in each fiscal year shall equal the level of receipts plus interest in that year, and these appropriations can be used only for aviation investment programs, which are defined as FAA's capital accounts plus the Trust Fund's share of FAA operations. Further, the level of receipts was specified to be the level of excise taxes plus interest credited to the fund for a fiscal year as set forth in the President's budget baseline projection for that year.

Trust Fund's Uncommitted Balance Has Been Declining in Recent Years

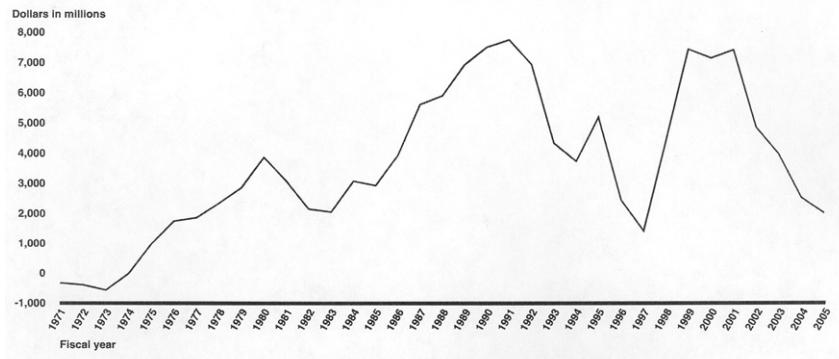
As shown in figure 4, with the exception of its first four years, the Trust Fund has ended each year with an uncommitted balance; however, the amount of the uncommitted balance has fluctuated substantially over time, generally increasing when Trust Fund revenues exceed appropriations from the fund and decreasing

³ Generally, legacy carriers are those network airlines whose interstate operations predate airline deregulation of 1978 and that have adopted a hub-and-spoke network model.

⁴ In a majority of years since its inception, the Trust Fund has funded some portion of FAA's operations.

when they are less than appropriations. As noted in the figure, the uncommitted balance has decreased substantially in recent years. The Trust Fund's uncommitted balance peaked at over \$7 billion in 1991, 1999, and 2001. In contrast, because of lapses in the taxes that accrue to the fund, at the end of 1982, the uncommitted balance was about \$2.1 billion, and at the end of 1997, it was about \$1.4 billion. Specifically, the Trust Fund's uncommitted balance decreased from \$7.3 billion at the end of 2001 to \$4.8 billion at the end of 2002 and has continued to decrease since then, reaching about \$1.9 billion at the end of 2005. However, the rate of decrease has slowed; in 2005, the uncommitted balance decreased by about \$500 million, after falling by at least \$900 million in each of the previous 3 years.

Figure 4: Trust Fund's End-of-Year Uncommitted Balance Has Trended Downward in Recent Years



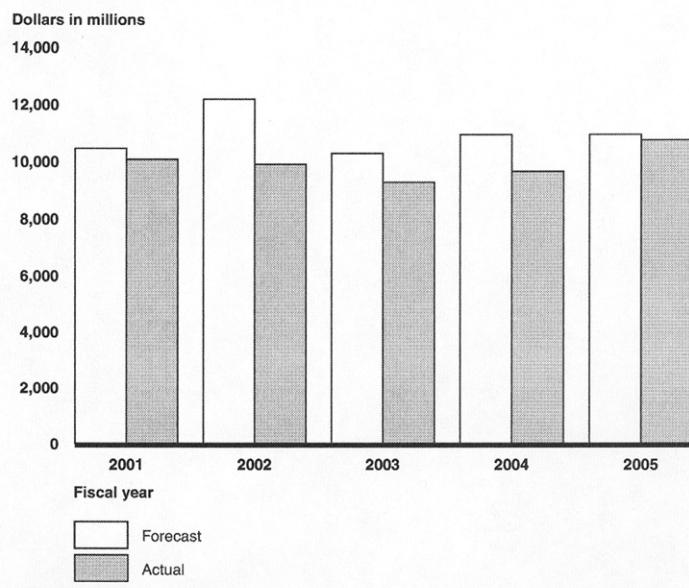
Source: GAO analysis of Congressional Budget Office data and FAA budgets.

The uncommitted balance has fallen in recent years because Trust Fund revenues have fallen short of forecasted levels by over \$1 billion in 3 out of the last 4 fiscal years. For example, in 2001, the difference between forecasted revenue and actual revenue coming in to the Trust Fund was \$383 million less than expected. In 2002, the difference jumped to \$2.3 billion due to the impact that unanticipated external events such as the September 11, 2001, terrorist attacks had on the aviation industry. Residual effects and other factors such as the war in Iraq and the SARS outbreak lasted through 2003 and 2004, with each year's actual revenues coming in at least \$1 billion below forecasted revenues.

As mentioned above, under Vision 100 and its predecessor, AIR-21, appropriations made available from the Trust Fund are based on forecasted revenues.⁵ Thus, if actual revenues approximate forecasted revenues, there should be no substantial change in the uncommitted balance. However, as shown in figure 5, for each year beginning with 2001, actual revenues, including interest, have been less than forecasted, so that in each year since then, the uncommitted balance has fallen.

⁵ FAA has developed econometric forecast models and established a forecast process that attempt to anticipate changes that may affect the future direction of the aviation industry. Using this forecast process, FAA annually provides 12-year forecasts of aviation demand and activity measures that are used for aviation-related personnel and facility planning. FAA also occasionally sponsors workshops that focus on the forecasting process and ways to improve the reliability and utility of forecasting results. Some errors in forecasting can be attributed to unanticipated external events and their impact on activity (e.g., terrorism, the outbreak of SARS, rapid rise in oil prices); others can be attributed to errors in the assumptions (e.g., passenger trip length, seats per aircraft, economic growth) behind the forecasts.

Figure 5: Comparison of Forecasted Revenue and Interest with Actual Revenue and Interest Received

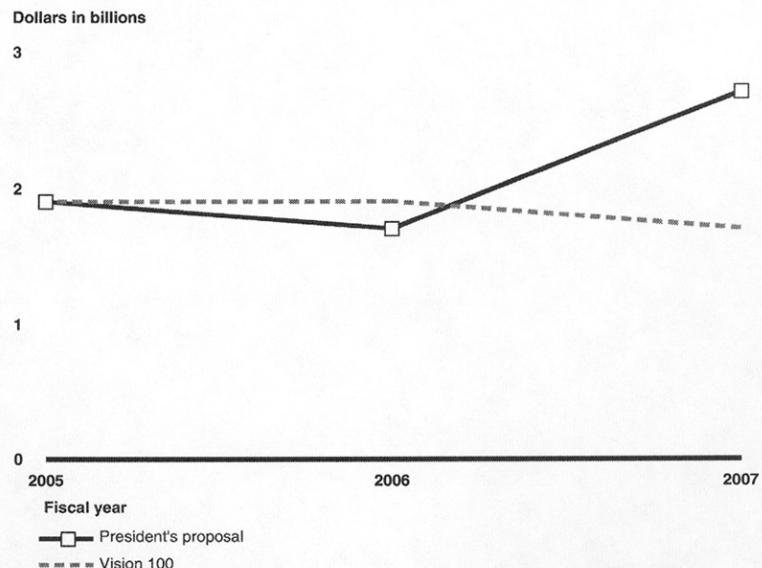


Source: GAO analysis of FAA data.

Fund's Uncommitted Balance Is Projected to Be Positive through 2007 but Depends on Realization of Forecasted Passenger Traffic Levels and Airfares

Based on its revenue forecast and appropriations for 2006, FAA forecasts that the Trust Fund's uncommitted balance will decrease by the end of 2006 to about \$1.7 billion. FAA forecasts that if, for 2007, the Congress continues to follow the Vision 100 formula for linking budget resources made available from the fund to expected revenues, then there will be little change in the uncommitted balance—\$1.7 billion—during that year. If, instead, the Congress adopts the President's budget request for FAA for 2007, FAA forecasts that the fund's uncommitted balance by the end of 2007 will rise to about \$2.7 billion. This higher forecasted uncommitted balance occurs because the President's budget calls for an appropriation from the Trust Fund that is about \$1 billion lower than the Vision 100 formula. In addition, compared with Vision 100, the President's budget calls for a reduction in the appropriation to FAA from the General Fund of about \$500 million. Thus, in total, compared with Vision 100, the President's budget calls for a reduction of about \$1.5 billion in FAA's appropriation. Figure 6 shows the forecasted year-end uncommitted balance under both scenarios through 2007.

Figure 6: Trust Fund's Projected End-of-Year Uncommitted Balance under Vision 100 and President's Budget Proposal



Source: GAO analysis of FAA data.

While the President's budget calls for making a smaller appropriation available from the Trust Fund than under Vision 100, largely due to reductions in the AIP, it calls for greater reliance on the Trust Fund to fund FAA's operations. Vision 100 uses the formula created in AIR-21 to determine how much funding for FAA operations should come from the Trust Fund, but the President's budget proposal does not use this formula. Under Vision 100, the formula makes the amount of Trust Fund revenue that will be authorized for FAA operations and RE&D in a given year equal to projected Trust Fund revenues (as specified in the President's budget) minus the authorizations for the capital accounts (AIP and F&E) in that year. Thus, under Vision 100, the Trust Fund is projected to support \$4.6 billion of FAA's operations, or 57 percent. In contrast, the President's budget specifies a set amount of Trust Fund revenue to be used for FAA operations. Therefore, if Congress enacts the President's budget request for FAA, the Trust Fund would provide \$5.4 billion for FAA's operations in 2007, or 65 percent of its total estimated cost for operations.

Although the Trust Fund is projected to have a surplus at the end of 2007 under each of the expenditure proposals, this projection depends to a significant extent on achieving forecasted commercial passenger traffic levels and airfares, as they have the largest impact on the amount of revenues flowing into the Trust Fund. We recognize that it is difficult to anticipate future events that may significantly affect the demand for air travel, particularly since FAA makes a forecast that is contained in the President's budget based on information available in the first quarter of the preceding fiscal year. However, our analysis shows that for each of the last 5 years, FAA's projected revenue forecast for the President's budget was higher than the actual amount of revenue received, as shown in figure 5.

Given the differences in recent years between the forecasted revenue and actual amount of revenue received, we conducted sensitivity analyses to estimate what would happen to the Trust Fund's uncommitted balance if Trust Fund revenues in

2006 and 2007 fall below the levels that FAA projected in March 2006.⁶ For example, table 2 shows the projected Trust Fund balances under Vision 100 and the President's proposal and the impact if revenues, for whatever reason, are 5 percent or 10 percent less than currently projected. If revenues are 5 percent lower than projected, which they were in 2001, the Trust Fund would have a small but positive uncommitted balance under both expenditure proposals—Vision 100 and the President's budget proposal. However, if the revenues were 10 percent lower than projected, as they were in 2004, the uncommitted balance would drop below half a billion dollars under the President's proposal and would fall to zero by the end of 2007 under Vision 100.

Table 2: Sensitivity Analysis of the Trust Fund's Uncommitted Balance to Revenue Shortfalls

Revenue scenario showing projected uncommitted balance		Fiscal year	
		2006	2007
Baseline uncommitted balance as of March 2006	Vision 100	\$1,722	\$1,718
	President	1,722	2,706
If revenues are 5 percent less than projected	Vision 100	1,189	595
	President	1,189	1,582
If revenues are 10 percent less than projected	Vision 100	657	0
	President	657	459

Source: GAO Analysis of FAA data.

We believe these scenarios raise concerns because, in the past, the Trust Fund's uncommitted balance was used to offset lower-than-expected Trust Fund revenues and decreased General Fund contributions. FAA could help address these concerns by continuing to look for ways to improve efficiency and reduce costs. However, the zero-balance scenario would most likely have implications for Congress in funding FAA programs.

To keep the Trust Fund from declining, the Congress could use an alternate basis for authorizing and appropriating money out of the Trust Fund that does not rely on the revenue forecast in the President's budget. One alternative that would still maintain the link between revenues and spending would be for appropriations from the Trust Fund to be based on the actual Trust Fund revenues from the most recent year for which data are available. That would mean, for example, that the Congress would appropriate for 2007 the Trust Fund revenues received in 2005. Although that would make it less likely that the Trust Fund balance would decline further, it could also mean that a smaller appropriation would be made available for aviation. Whereas Trust Fund revenues in 2005 were about \$10.8 billion, the President's budget for 2007 forecasts Trust Fund revenues of about \$11.8 billion.

Future Policy Decisions Will Affect the Trust Fund Balance beyond 2007

Future policy decisions concerning spending for aviation will affect the Trust Fund balances beyond 2007. If General Fund appropriations for FAA's operations are maintained at recent levels, future projected Trust Fund revenues under the current tax structure may be insufficient to pay for the expenditures that FAA says are needed to maintain and modernize the current system. According to FAA, its aviation infrastructure is aging, and replacing it will cost \$32 billion. Even more, Trust Fund revenues would be needed to pay for those expenses if General Fund appropriations for operations are reduced. Insufficient Trust Fund revenues could result in critically needed capacity-enhancing air traffic control modernization investments being deferred or canceled at a time when commercial activity is returning to or exceeding pre-September 11 levels.⁷

⁶We did not conduct a sensitivity analysis beyond 2007 because both the current FAA authorization and the excise taxes that fund the Trust Fund are scheduled to expire at the end of 2007, making it difficult to project the long-term financial outlook of the Trust Fund.

⁷We note that the Trust Fund projections for 2008–2011 contained in the President's budget show a large increase in the fund's uncommitted balance, reaching \$15.5 billion by the end of 2011. Officials at the Office of Management and Budget told us that the underlying assumption

Funding Will Be Needed for the Next Generation Air Transportation System

In addition to costs projected just to maintain FAA's current system, additional capital expenses are on the horizon to modernize the system. Vision 100 directed the administration to develop a comprehensive plan for a Next Generation Air Transportation System (NGATS) that can accommodate the changing needs of the aviation industry and meet air traffic demands by 2025. The act chartered the Joint Planning and Development Office (JPDO) within FAA to coordinate Federal and private-sector research related to air transportation. FAA leads the interagency effort that leverages expertise and resources within the Departments of Transportation, Defense, Homeland Security, and Commerce as well as at the National Aeronautics and Space Administration and the White House Office of Science and Technology Policy. The Congress appropriated \$5 million to FAA in seed money in 2005, and appropriated \$18 million to FAA for JPDO in 2006, while additional funding and in-kind support comes from the participating agencies. For 2007, the President's budget requests \$18 million for JPDO critical system engineering and planning efforts for NGATS, as well as funding for two NGATS systems at a combined cost of \$104 million.⁸

JPDO published the *Integrated Plan for the Next Generation Air Transportation System* in December 2004, but the plan did not specify what new capabilities would be pursued or how much they would cost to implement and maintain. Vision 100 also directed that an annual progress report, including any changes to the Integrated Plan, be submitted at the time of the President's budget request. In March 2006, JPDO published its *2005 Progress Report to the Next Generation Air Transportation System Integrated Plan* and reported it is working to identify the longer-term costs. JPDO conducted a financial analysis of the air traffic management portions of NGATS, including examining the existing 2025 operational vision, to understand the hardware and software components that may be required to implement NGATS. However, because of the high level of uncertainty in some areas and a significant number of assumptions in others, JPDO reported more work is required before this analysis can be useful and credible.⁹ A clear understanding of proposed future capabilities for NGATS (and how they will be paid for) will be important as the Congress prepares to reauthorize FAA programs and explores financing mechanisms.

Continued Efforts for Cost Control Are Necessary

While FAA has made great efforts in its cost-control program, cutting costs will remain a challenge for FAA well into the future. In 2005, FAA outsourced its flight service stations to a private contractor, resulting in total savings estimated at \$2.2 billion. Also in 2005, FAA put in place a number of cost-control initiatives that affected smaller programs and that, if successful, will generate smaller levels of savings. We are reviewing options to fund FAA, at the request of this Subcommittee, and we will address this issue in detail later this year.

Although FAA has initiated several of these cost-control measures, these initiatives alone cannot reduce expenses enough to free up sufficient Trust Fund revenues to pay for the expenditures that FAA says are necessary to maintain and modernize the current airspace system, let alone finance future NGATS initiatives. Through the reauthorization process, the Congress will determine both the level of appropriations for aviation and the way in which that commitment will be funded. Congressional decisions pertaining to the link between annual Trust Fund revenues and appropriations made available for aviation programs, as well as the method for funding the Trust Fund, will continue to influence future Trust Fund balances.

To assess the current financial status and projected financial viability of the Airport and Airway Trust Fund, we obtained financial data from FAA and interviewed FAA officials familiar with the information. To assess the comparisons of Vision 100

for the commitment of budget resources from the fund that yields this projection is based on Administration policies for reducing—or limiting the increase in—nondefense, nonhomeland security discretionary spending. Thus, the projection does not account for challenges particular to any agency, such as FAA's projected increase in workload or future air traffic control modernization spending. Accordingly, we think the \$15.5 billion projection is of limited value.

⁸ The President's Fiscal Year 2007 budget requests \$80 million for the Automatic Dependent Surveillance-Broadcast system to replace antiquated radars and outmoded technology. The budget also requests \$24 million to begin developing System Wide Information capabilities that will make advanced information distribution and sharing capabilities possible.

⁹ In order to address these matters and to better understand the costs and benefits of NGATS, JPDO has asked the NGATS Institute to host a forum in the spring of 2006, so that the critical assumptions and uncertainties underlying any cost-benefit effort can be scrutinized and validated. In addition, further detailed studies will focus on the near-term costs and benefits that will be used to inform agency planning activities over the next 5 years. JPDO will then expand its cost analysis to consider the expected total systems costs for NGATS.

with the President's budget, we analyzed the legislation and the Administration's 2007 budget proposal. We used a sensitivity analysis to project what would happen if Trust Fund revenues in Fiscal Years 2006 and 2007 were 5 percent and 10 percent lower than the levels projected by FAA in March 2006 under each of these proposals. Accordingly, our findings on the financial outlook of the Trust Fund are based on GAO projections, not FAA's. We performed our work in February and March 2006 in accordance with generally accepted government auditing standards.

Mr. Chairman, this concludes my prepared statement. At this time, I would be pleased to answer any questions that you or other Members of the Subcommittee may have.

Senator BURNS. Thank you. We appreciate the work that you do.

We've been joined by Senator Pryor from Arkansas. And, Senator Pryor, do you have a statement or—

Senator PRYOR. No, thank you.

Senator BURNS. We'll go into our questions. And I appreciate the testimony from all of you.

Ms. Blakey, FAA has forecast dramatic growth in the aviation industry. And I just want us to start off with the question, if we have increased load factors—in other words, the passengers are coming back—and yet, we depend on that 7.5 percent for the majority of the lion's share of your support in the—of this department, has those increased riderships had any effect on the revenue that comes into the FAA?

Ms. BLAKEY. Certainly as the numbers of passengers go up, we see increased revenue. The question, of course, is what will happen with ticket prices, because when those prices begin to fall, obviously there's an offset there, and we've watched ticket prices falling dramatically—

Senator BURNS. In other words the—

Ms. BLAKEY.—over the last few years.

Senator BURNS.—the increase in load factors hasn't taken up the slack for the loss of the price of a ticket.

Ms. BLAKEY. No. We do think there's going to be a bit of an up-tick this year in the price of tickets, maybe as much as 10 percent. But, then we think it's going to start dropping again. So, it's a very volatile thing, and it really doesn't relate to the workload.

Senator BURNS. How can we justify the \$765 million cut to the AIP program, then?

Ms. BLAKEY. Mr. Chairman, it's a very, very tight budget environment. I will have to just start right there. Because I think that we see over the last 5 years that there has been very substantial investment in the airport community. And last year we pointed out that the airport community's own assessment projecting future investments—this is a report called the NPIAS, which looks at all kinds of capital investments—was down about 15 percent. We also saw that private investment out there, in terms of bond issuance, et cetera, was down in the airport arena. This year, it is not as clear as that. We see about a 3 percent uptick in that same measurement.

But the fact of the matter is, there has been very substantial investment, and the funds are very much needed in other aspects of aviation investment.

Senator BURNS. When I look at this—and, of course, your request for the cuts that are being indicated now by the President's budg-

et—do you go down to OMB and try to make your case that this is not a good idea?

Ms. BLAKELY. Senator, as you can appreciate, we have robust debates within the Administration, talking about relative needs. There's no question about the fact that healthy investment in airports is critical to our Nation's economy. I think the question is at what pace. And at this point, given competing needs, that's where these decisions get sorted out.

Senator BURNS. Mr. Dillingham, you've done good work and reviewed the AIP program over the years. Give me your bottom line. What do you think the effect of that is going to have on the system? And how do we approach this? Do we approach it from a revenue side, or is there any room for efficiency and efficiency savings?

Dr. DILLINGHAM. Mr. Chairman, I want to start with reiterating what the Administrator just said, that after 9/11 there was a slowing of need for infrastructure, the passenger level was down, and, therefore, there were not that many requests for AIP money. And that's sort of reflected at this point. Also, what we found in our analysis is that in a couple of cases the AIP program has been used almost as a contingency fund. And, by that example, I mean, that right after 9/11 about a half a billion dollars was taken from the AIP program for security purposes. And as recently as last year, there was another hundred million or so taken to use for Katrina relief.

So, I think in the short term, the AIP request is probably around the right mark, at this point. But, again, I emphasize that this is probably in the short run, rather than in the longer term, because traffic is increasing. And, as the Administrator said, they're seeing, now, an uptick in requests for AIP funds. And, as always, the priorities across the Nation in the budget are such that, tough choices have to be made.

Senator BURNS. Thank you.

Senator Stevens?

The CHAIRMAN. Thank you very much, Mr. Chairman.

It will surprise no one that I want to get a little provincial here today. But, as I said, we have 241 different little villages that, of them, 159 can be reached only by air. Under this proposal, the funding for those small airports is zero. We have the largest cargo landing airport in tonnage, in the country, I believe, now, at Anchorage. And the funding for cargo airports is reduced by \$27.2 million. Now, that is one function that earns money. And yet it has seen a substantial reduction.

The Capstone and weather camera functions of Alaska, which are part of the safety system we started when we first started reviewing safety in Alaska, we found that one out of 11 pilots in Alaska die. And we have turned around the death rates. And we turned around the crash rates. It is safer now to fly in Alaska than it is in most parts of the country. But this budget reduces, by \$23.3 million, the funding for the Alaska Weather and Capstone. We had a \$5 million contribution to the Aviation Safety Program in Alaska. That is zeroed out.

One of our volcanoes is spewing out as I speak, and Alaska Observatory funding for the FAA functions associated with that, which is the—really, the wind profiling and to determine where the

ash goes when the volcanoes go up—and we have more volcanoes in Alaska than any other State of the Union. We, as you know, almost lost a Korean liner, because they did not know where the ash was. We have not had any such incident, although we've had several volcanoes erupt since that time. That contribution of FAA has been zeroed out.

And we have waited in line to be—have the LORAN-C upgrades. Strangely enough, although they're the most functional and the most—we depend on them more than anyone, the LORAN-C upgrades that have not been completed are in Alaska. These are the last stations to be upgraded. Once again, our stations were last in line, and now that function is zeroed out.

I have reason to believe that this budget was prepared before the fight over earmarks was started. And I'm certain that people at the budget, and perhaps even in the FAA, thought that this former Chairman of the Appropriations Committee, and now Chairman of Commerce, would find ways to restore those moneys. It appears now that's going to be almost impossible.

Now, my question to you is, How do we function in Alaska, where there are no trains, there's one train, but into those villages, no trains, no buses, no taxis, no access, except by air—how do we function in Alaska, which is one-fifth the size of the United States, if the bulk of the cuts of the FAA are assessed to Alaska?

Ms. BLAKELY. Well, I can promise, Mr. Chairman, there is certainly no intent that the bulk of the cuts, in any way, would be assessed to Alaska, because I cannot think of a state in the Nation where aviation is more critical. Montana, of course, certainly, Chairman Burns, is also one that depends a great deal on aviation. And we're acutely conscious of the fact that the program that you mentioned, Capstone, has been a tremendous success. In fact, I think—

The CHAIRMAN. It's now being demonstrated worldwide. And I—

Ms. BLAKELY. Yes.

The CHAIRMAN.—flew on one of the first Capstone missions, to determine if that's—but, again, I have no way to explain this to my people, other than to say, well, I think they expected me to put them back in as we adjusted the budget. But that, as I said, under the current circumstance, I think, is next to impossible this year.

Ms. BLAKELY. Well, what I would point out is this. On the airport funding, despite the fact that the funding under the formulas that are there for the AIP program currently, the small nonprimary airports do not receive passenger entitlement funds like they have in the past. They've, on average, gotten about \$900,000 over the last 5 years. And this year that would not be the case under the existing formulas.

I would also point out, however, they are eligible for discretionary funding. And, certainly, where there is great need, I would expect, from a safety standpoint, that will be a top priority from our standpoint. We're anticipating that the AIP funds will be able to cover all of those requests that go to critical safety needs, as well as the existing letters of intent and commitments that we have made.

On Capstone, what I would also point out is, of course, there is funding in the budget for Capstone. We do consider it a very successful program, with a 40 percent reduction in the fatal accident rate in Alaska. So, the intent is to sustain that program and move it along, while at the same time, we are moving toward national deployment of ADSB. And there is the intent to ultimately merge those programs. So, some of this goes to transition periods, as well.

As you know, there has not been a request in the budget for LORAN-C for a number of years, and it has been something that has been put in by Congress each year. You're quite right that it has been previously dealt with by an earmark. But the budget request on LORAN-C is consistent with previous years.

What I can—

The CHAIRMAN. It's zero.

Ms. BLAKELY. Yes, exactly. Well, that's where it has also been in previous—

The CHAIRMAN. That was—

Ms. BLAKELY.—Presidents' budgets.

The CHAIRMAN.—depending on those of us who came from areas where they had to have LORAN-C upgraded, moving money around and putting money in every year. Now, as I tell you, I don't think that's possible here. But the real problem that I have is that when you look at this budget—you don't see it from my eyes, but I remember sitting at the Commerce table with Senator Cannon, when he was chairman. He wanted to do away with the CAB. I opposed that. Under the CAB, the CAB mandated that these small villages be served. Now it's no longer a mandate. We have Essential Air Service programs. It's another budget. But it, too, has been cut back. Each one of those airports has an entitlement of \$150,000 a year, because the flight service station was closed, all other aspects of assistance to that area was closed. And each one of them was deemed essential to survival. And yet, every one of those small villages has been deleted now, in terms of that small payment of \$150,000, which is used to maintain and keep those airports open. They're the only access to the outside world. The only. As a matter of fact, we just finished, this last year, getting lights on some of them and they're dark half of the year.

Now, I find it very difficult to deal with this issue under the current anti-earmark syndrome. I, frankly, don't know what the Committee's going to do yet, but I know, when we get to the floor, people are going to say, "There you go again, you're earmarking." We had to earmark every year, because we were left out. And, as you say, for the LORAN-C, zero all the way back. But I can't remember a budget that didn't have some money for LORAN-C upgrades. And now, as we get to the point—we're last—as we get to the point where the last to be upgraded are in Alaska, the zero can't be filled in. And you can't fund it because of this penchant against congressional earmarks.

So, I really don't know how to handle this. And I urge you—I urge you to go back. We're going to have to get a budget amendment so that these are not earmarks. These people made the assumption that I would change that, as I have for years. And it's a distressing situation to be in. I do understand the overall budget situation, but I don't understand small amounts like this being de-

leted. The total to keep Alaska safe would be less than, I think, about \$30 million. But enough said.

Thank you, Mr. Chairman.

Senator BURNS. Senator Pryor?

**STATEMENT OF HON. MARK PRYOR,
U.S. SENATOR FROM ARKANSAS**

Senator PRYOR. Thank you, Mr. Chairman.

And I must echo some of the same concerns that Senator Stevens has about the budget and zeroing out some programs that really help rural America.

Administrator Blakey, let me ask you about the next generation air transportation system. There are various estimates on this. And I've heard estimates as high as \$40 billion over the next 20 years. As I understand it, FAA has not made an estimate on it. Do you have an estimate on the cost of that today?

Ms. BLAKEY. No, we do not. As you can appreciate, this is something that is fairly complex, with a lot of variables. We tried this last year, in fact, to do what I would call a low-fidelity analysis. And it turned out that there were enough unknowns and variables that the numbers really weren't reliable. What we have done, though, Senator Pryor—and I think you'll take encouragement out of this—is, we're looking to the industry to work with us on this, to the experts in the academic fields, as well. And we have pulled together an investment analysis meeting at the end of this next month, where we will be spending 2 days going over the various figures and estimates on this. A lot of it depends on things that are outside of our control. How fast will the industry want to equip? There are billions and billions of dollars involved. What is the cost-benefit there? And what makes sense?

Depending upon the schedule and how you approach it, the variables are very significant. But what we'd like to do is come up with three buckets, if you will. The first would be an estimate for the next 5 years, which I think we can work to get, with some degree of high accuracy. The next would go out another 10, and then to the end of what we are projecting the schedule for this, which is 2025.

Senator PRYOR. OK. Let me also say, I'm glad to know meetings are continuing, but do you have a sense of when you'll have a complete plan? I mean, do you have a sense of when you'll come back to the Congress with a plan?

Ms. BLAKEY. This is really not like building a power plant. This is something where you're going where no one's gone before and you're projecting new systems here that really do change—in fact, transform—the entire system, not just in terms of air traffic control, but the way we approach security. It is developing weather systems that really don't exist right now. Some of this is technology that is very predictable. Some of it has not been developed in any way. And because of those kinds of things, it's not really like "name a number" and we'll know it with any kind of exactitude.

This year, what we are striving to do is to nail down the enterprise architecture, how all these pieces will fit together, and a broad concept of operations. If we and industry can agree on that with the other parts of government—remember, Department of De-

fense and Homeland Security have a big stake in this—if we agree on this, it will give us a lot greater degree of being able to project these costs, near term.

Senator PRYOR. OK.

Ms. BLAKELY. And I think that will be reliable.

Senator PRYOR. How much of this factors into your concern that you talked about a few moments ago, about the revenue stream? Because it sounds like the next generation project is an open-ended question, and you have no idea what it will cost. And, therefore, I would think it would be hard to say if the revenue stream you have today would be adequate to even get close to covering that.

Ms. BLAKELY. Well, since the revenue stream we have today is not tied, in any way, to costs, I would guarantee you that the way we are approaching it right now is going to be highly unpredictable from that standpoint. What we are looking to do, of course, is a way of paying for operational costs and capital investments in the future that is tied to cost, is predictable, and has a high degree of involvement with the stakeholder community. So, they're a part of the kinds of decisions about cost benefit. Is it worth it to move at this pace, with these kinds of investments, with the concomitant investments, from the airlines and others in the system? I think that kind of decisionmaking is going to give a very good, reliable way of paying for these costs. Some of it will also depend on structure. If you're doing it on a pay-as-you-go basis, as opposed to looking at capital investments the way the corporate community does, it obviously will have real impact on how much it costs.

Senator PRYOR. All right. Let me ask a question regarding the FAA budget. There's money in the budget to consider the consolidation of some air traffic control facilities. What is your opinion regarding consolidation? What is the criteria that you look at when you're thinking about consolidating various facilities? And, second, is there a list yet of targeted facilities for consolidation?

Ms. BLAKELY. Basically, what we try to do is look at the questions of where we are going to have needs for new construction, new towers, new TRACONs. What makes sense as you are planning these major investments in new facilities? And what kind of growth do you see in that area, in terms of air traffic? What will the needs be? You try to do that, vis-à-vis the costs of installing the technologies and the number of people you will need. If you do it on a consolidated basis, obviously there are economies of scale in pulling facilities together, in being able to use technology in one installation rather than in multiple installations. And you also can potentially use your workforce on a more efficient basis. It also provides some benefits to the workforce, because there are opportunities for controllers to move up, in terms of complexity and management of traffic. So, there are a number of advantages. And you have the potential to reuse existing facilities for other kinds of needs.

So, those are the kinds of benefits, versus the cost of relocation, the cost of building a larger facility, rather than keeping the existing structures. And that's done on a very individualized basis. And, no, there is no set list where we have a group of facilities that we are committed to closing. What we're trying to do is, on a smart basis, look at each one of these facilities and do that analysis. And

then we, of course, will be sharing that analysis with affected districts and with Members who are representing those districts in those States.

Senator PRYOR. And what's the timeline on sharing that information with the districts and with the representatives that represent those districts?

Ms. BLAKEY. We're beginning to do it right now—

Senator PRYOR. OK.

Ms. BLAKEY.—as a matter of fact. As you could appreciate, construction's ongoing, and there are a number of towers that are planned as new construction that are stipulated in the budget from Congress.

Senator PRYOR. Is it safe to say that communities feel more comfortable with air traffic control located in their community? I guess, though, what I'm hearing you say is, where the air traffic control facility is isn't as important as just making sure you have a state-of-the-art facility, because they can regulate air traffic hundreds of miles away. Is that fair to say?

Ms. BLAKEY. Basically, remember that what we're talking about here, largely, are the radar control facilities, the TRACONs, which have no windows. So, when you think of it in those terms, it really doesn't matter where the TRACON is located. And some of the new technology that has been developed, and that the taxpayers invested in heavily, the STARS system, for example, allows you to operate facilities within a 300-mile radius on a remote basis, which works very well. So, there's a lot of that, that can be done. Towers remain towers at those airports, but the issue of how you control, with radar control, is where you really can see that there is not a material difference to the community whether it is done there or at another location.

Senator PRYOR. Thank you, Mr. Chairman.

Senator BURNS. Ms. Blakey, while we're going along that timeline of reports and everything, as you know we're going to move into reauthorization. And the proposal was to come back to us with whatever you would like to see in it. When will you have your idea of how you want this bill reauthorized and what you would like to see in it?

Ms. BLAKEY. Mr. Chairman, no one wishes more than I do in this room right now that I had a precise answer for you. I will tell you, though, that we are working very hard on this. And I fully expect that the Administration's proposal will reach the Congress this spring. It is complex. And we've tried very hard to factor in a lot of input from the various stakeholders, this Committee, and this Congress. So, I hope that when we present the proposal, the nature of it will show that the time and the work that's gone into it was worth it.

Senator BURNS. All of you might want to take a shot at this one. We passed a highway bill. It contains a change in collection of fuel taxes for business and general aviation operators in that bill. Under the provision, when the fuel is initially purchased it is deposited in the Highway Trust Fund. Only when an operator applies to the IRS for a refund does the 21.9 cents transfer from the Highway Trust Fund into the Aviation Trust Fund. Now, we're hearing Montana constituents say that the process is very burdensome.

And I'm drafting legislation now to alleviate that problem. But it might also be made as a permanent solution when we reauthorize FAA.

I've got some concern about that. And do you want to share your ideas on how we handle that and how we can streamline that process?

Mr. Zinser, do you have an idea on that?

Mr. ZINSER. Yes, sir. Mr. Chairman, I think that that change was trying to address an issue of fuel tax diversion, where there is a problem with people buying the fuel tax-free for aviation purposes, but then diverting the fuel to on-the-road use. And, as a result of that, they committed a fraud and beat the Trust Fund out of money. And I think that was the purpose of the change in the rule there.

In terms of fixing it for the burdensome aspects of administering that, we haven't looked into that. We'd be happy to look at that and see what kind of burdens are being placed on the general aviation users.

Senator BURNS. Should that whole mechanism be changed? Mr. Dillingham, do you have a view?

Dr. DILLINGHAM. Again, Mr. Chairman, we have not looked at that, either. But, generally, opposition is, if there is a way to streamline a process and make it less burdensome, we would be in support of that. And, again, if you need our assistance with this issue, just please let us know.

Senator BURNS. Have you not made any recommendations with the knowledge you have now?

Dr. DILLINGHAM. No, sir, we haven't.

Senator BURNS. This coming year, what issues, programs, do you think we should keep a close eye on, and why? And I'm going to ask both of you to respond to those. What areas are you mainly concerned about?

Mr. Zinser?

Mr. ZINSER. The areas that we're mainly concerned about are in the F&E account with the two programs that I mentioned in my statement. The ERAM program, which is modernizing the en route center air traffic control system is important to watch. We issued a report last year and made recommendations to strengthen the program. We think that FAA is doing a good job on ERAM. However, they are ramping it up and it's coming out of the lab and being tested in the field. FAA will be spending a million dollars a day on ERAM. And if this program doesn't work right, it's going to have an effect on FAA's ability to deliver future systems.

We also have concerns about the FTI program. It's the only program in FAA that is designed to reduce operating costs. Initially, the FAA projected that by modernizing their telecommunications systems, they'd save \$800 million over 10 years. FTI was rebaselined in December 2004, and projected savings are down to \$600 million, and they've spread them out 5 additional years.

Right now, the program's not on track. We've issued a draft report, and FAA and the Department are taking it seriously. If the program gets back on track, FAA can still save some money.

Senator BURNS. When do you expect that report to be completed?

Mr. ZINSER. We are waiting for FAA to get back to us with their formal response. And I think the date that we're expecting that is early April.

Senator BURNS. Do you want to respond to the original question, Dr. Dillingham?

Dr. DILLINGHAM. Well, Chairman Burns, I think it's only fair to put the other side of the equation up. We, also, are concerned with some of the F&E programs, as the DOT IG has suggested. But I think the other side of the coin is that we need to recognize that over the past 2 years the FAA has done—made tremendous strides in achieving its F&E goals, and has met their schedules and costs for those 2 years, which we think is a very good sign that things are changing. I think a lot of effort will be involved in trying to get ready for the next reauthorization. The issues that the Senators have raised this morning with regard to the cost for NGATS and things related to it.

Senator BURNS. Senator Lautenberg, welcome to the Committee—

**STATEMENT OF HON. FRANK R. LAUTENBERG,
U.S. SENATOR FROM NEW JERSEY**

Senator LAUTENBERG. I thank you.

Senator BURNS.—up here in the middle of the day.

Senator LAUTENBERG. And I commend you for holding this hearing. We face lots of problems that we're concerned about. And I ask consent that my statement—opening statement—

Senator BURNS. Without objection, it'll be made part of the record.

Senator LAUTENBERG. OK.

[The prepared statement of Senator Lautenberg follows:]

PREPARED STATEMENT OF HON. FRANK R. LAUTENBERG,
U.S. SENATOR FROM NEW JERSEY

Mr. Chairman,

Thank you for holding this important hearing.

Mr. Chairman, the President's budget calls for us to continue cutting aviation infrastructure funding—this time by more than 800 million dollars. Instead of laying the groundwork for a safe future for aviation, the President's short-sighted budget proposal would undermine our ability to travel safely and efficiently.

We all know that our highways are crowded. The same is true of our airspace. How many times have we been forced to sit in airplanes that waited an hour or more to take off? Sometimes the wait takes longer than the flight itself.

We can't create more airspace. The only way to handle more aviation traffic is to upgrade the equipment that is used by air traffic controllers on the ground.

The Bush Budget proposal wouldn't move us forward—it would take a step backward. Some would blame budget pressures in aviation on the pay of air traffic controllers. But the fact is, we are already at terrible risk of not having enough controllers to operate the system safely. Because the Bush Administration has been dragging its feet when it comes to hiring new controllers, we are in a position where 3,200 controllers could retire today—almost 20 percent of the workforce.

Mr. Chairman, you can't just get air traffic controllers off the street—it takes, on average, four years to train a controller.

The Administration projects that air passengers and cargo will triple by 2025. The result could be a nightmare of unbearable aviation delays. This could have a crippling effect not only on the aviation industry, but on commerce in our Nation.

The Bush Administration recently proposed a new aviation security tax increase that would hit family travel especially hard. The Senate adopted my amendment to the Fiscal Year 2007 Budget Resolution to strip out this unfair proposal, and I hope

my colleagues on this Subcommittee will support my efforts as the resolution goes to conference.

Thank you, Mr. Chairman.

Senator LAUTENBERG. I'm glad to see our Administrator and our other distinguished witnesses here today.

I suffer from a disease called "delay while traveling." And since I fly frequently——

Senator BURNS. Is that contagious?

Senator LAUTENBERG. I think so.

[Laughter.]

Senator LAUTENBERG. Yes, it's spread around the country, there's no doubt about it.

[Laughter.]

Senator LAUTENBERG. Sometimes the flight that I take back up to the New Jersey/New York region has a longer waiting time on the ground than it has flying time. And that's often at departure, as well as landing.

Senator BURNS. I'll loan you my pickup. You can drive it, you know.

[Laughter.]

Senator LAUTENBERG. I'll borrow your horse, instead.

[Laughter.]

Senator LAUTENBERG. Enough of this personal stuff. Excuse us for the alacrity.

Administrator Blakey, we've talked lots of times over the years about functioning at Newark and the air traffic safety around airports. And you know that I sit in the second seat often enough to be a nuisance, but how many more air traffic controllers do you think we need to move air traffic safely at Newark Airport? Do you have any idea?

Ms. BLAKELY. Senator, I haven't looked at the exact numbers on Newark very recently, so I won't try to hazard a number, but I'd be happy to get with you.

Senator LAUTENBERG. Yes, please do.

Ms. BLAKELY. As you know, right now we are, for the most part across the country, staffing at about the level where we feel we are both—certainly accomplishing the safety mission, without question, and also have the kind of staffing that is handling the traffic. Traffic is a bit down right, as may not be apparent at Newark, because you're flying in——

Senator LAUTENBERG. It's not apparent at all, yes.

Ms. BLAKELY.—some of the most congested airspace of the country. But, overall, our staffing is right about the level it needs to be. We're staffing up in the en route centers more, because that's where we see that we have greater needs. But I'll be happy to get with—you a figure——

Senator LAUTENBERG. Please——

Ms. BLAKELY.—on Newark.

Senator LAUTENBERG.—please look at that, because I keep seeing reports that we are not fully staffed. And when we anticipate, as a national concern, retirements——

Ms. BLAKELY. Yes.

Senator LAUTENBERG.—and the time needed for training and recruiting and so forth, do you think we have enough people to take

care of that? Because a little over a year ago you said that 1,248 controllers would be—need to be hired in Fiscal 2007. But I think the President's request differs, and he's only looking at—about a hundred less, about 1,136, compared to the 1,248 objective that you've laid out. How many air traffic controllers do you intend to hire in the next year?

Ms. BLAKELY. Basically, the way we are approaching this is with a dynamic that obviously has to adjust as a number of variables change here. The numbers that you're referring to were generated in the controller staffing plan that we issued about a year—more than—well more than a year ago, and were based on three forecasts ago. So, that tells you there's a question of trying to keep these things up to date. As you know, we also, of course, are going for greater productivity enhancements so that we are able to, in fact, achieve productivity levels that we had not been able to previously. So, all of those variables come into play.

We will be issuing a new controller staffing plan. And we have adjusted our timing on that so it comes out right after the new forecast. We've just had a forecast, as you may know, that came out about a month ago. And so, we are looking to have a new controller staffing plan on the street, which will have numbers that are much more closely correlated to the best estimates we have.

What I can tell you is this. We are looking at net increases over and above the retirements that we are having, because we do need to overlap a larger number of controllers with those in the towers and TRACONs that are going to be leaving, so they can train up and move out. And the figures are going to reflect net increases as we move along.

Senator LAUTENBERG. Well, I don't know how we account for the traffic delays and, at the same time, assure ourselves—or support the notion that traffic is down. There is something wrong somewhere. There are constant delays. And here, almost every one of us travels long distances, or gets on an airplane, to get home or to get around the country. Delays are interminable. It's constant. And when we face the prospect, Dr. Dillingham, of the light jets, I think the figure is estimated to be 5,000 over the next 10 years, and we've produced separations, and we look at a heavier workload for controllers—I don't understand where it's all going to go. The sky, as you folks know, is finite. And if we add that number of new craft there, and flights that I travel on seem to be fairly well filled, but the delays, again, are constant, how do we adjust to that condition? Is this not really the case, that delays are being reduced?

Ms. BLAKELY. Actually, Senator, I would comment on this. The delays abound. So, this is a nationwide problem right now. The unfortunate thing is, you're experiencing what a number of people are, believe me. I mean, if you're flying in some of the most congested airspace we have, which the East Coast is, there's no doubt about the fact that we are, at this point, packing a lot of aircraft into the upper level airspace. So even the ability to get up and into the traffic streams doesn't solve the problem. In addition, airports such as the ones that you're flying out of, there really is no place to expand. I mean, if we could get some more tarmac, it would help. But there's really no way to do that. So, a lot of it does go to things like airspace redesign. And, as you know, we have a plan

on the street right now where we're having public hearings for redesign of the airspace in the New York/New Jersey area, four different options. And we're looking forward to seeing how that will proceed.

Senator LAUTENBERG. Ms. Blakey, doesn't that affect traffic nationwide?

Ms. BLAKEY. Yes.

Senator LAUTENBERG. I mean, if it's congested here, then it affects the whole system.

Ms. BLAKEY. It can have a ripple effect through the entire system. It's one of the reasons why we pay so much attention to the New York/New Jersey/Philadelphia area, because those airports are critical for the flow.

Senator LAUTENBERG. Mr. Chairman, your patience is appreciated. I want to ask one more thing.

Will the Administration propose a new user fee for any segment of the general aviation community, including business aviation? There's constant griping by the airlines to the fact that private or general aviation gets a kind of a free pass on the costs for entering the airspace. There's a ticket tax for every passenger that goes on commercial. And that's not the case in general aviation. And I wonder whether anything is contemplated, by way of a fee for general aviation, to compensate for that.

Ms. BLAKEY. Senator, as I mentioned to the Chairman before you arrived, I would be the happiest person in this room if the Administration's proposal were before us all to discuss. I'm not able to comment on it, because it still is under review. And so, I can't discuss the final characteristics—but I would tell you this, we have heard, in a great degree of detail, from the affected stakeholder groups. We have heard from the general aviation community, about their view that they are marginal users of the system, and from the air carriers, about their view that they are picking up too large a burden of the cost. So, we have factored all of those kinds of concerns and comments into the proposal we will be putting forward. And I hope that you will see that it is taking an approach that we seek to balance those competing concerns and interests.

At this point, our chief concern is that we are able to tie the costs of the system to the revenue, and to come up with a stable cost-based system that is more equitable than the current system is.

Senator LAUTENBERG. Thank you, Mr. Chairman.

Senator BURNS. Thank you, Senator Lautenberg.

The budget commits \$18 billion to the Joint Program and Development Office. Can you explain to us, all three of you take a shot at this, the main purpose of this office and how this \$18 billion to that Joint Program Development is used—

Dr. DILLINGHAM. I'll take the first shot.

Senator BURNS.—for the Committee?

Dr. DILLINGHAM. Chairman Burns, the JPDO is—

Senator BURNS. Million. I'm sorry. I said billion. Million.

Dr. DILLINGHAM. The JPDO is the organization that consists of several Cabinet-level agencies that has been mandated by the Congress to develop the plan for the next generation air traffic control system. And the process that they're using is a process—at least initially, of leveraging resources from the constituent partner agen-

cies. NASA and FAA are putting in approximately the same amount of money for the JPDO. The JPDO is using that money ostensibly to plan and do demonstration projects and activities. We recently did an analysis of where the JPDO was, and what the status was. I think it's fair to say that, based on the complexity of what they've been asked to do, that they are doing a relatively good job. We also identified some challenges that they have to face as they move forward, including the fact that it is an organization that doesn't really have the authority to control other Cabinet agency budgets and personnel, and also that they have to maintain this stakeholder involvement as they move down the line. And some stakeholders—some critical stakeholders are not involved in it. In the history of that kind, the situation has not been real good with the current ATC modernization system.

So, I mean, that's what it's put up to be, that's why it was mandated. And that's how it is proceeding at this point in time. It's about 2 years old, a little over 2 years old, headquartered or housed primarily in FAA.

Senator BURNS. Mr. Zinser—

Mr. ZINSER. Yes, sir, the—

Senator BURNS.—any comments on the—

Mr. ZINSER. The \$18 million that is in FAA's budget is also leveraged with appropriations from other agencies that participate. And Dr. Dillingham is correct, it's primarily a planning exercise at this point, trying to integrate the interests of all the stakeholders, the six different departments involved, or agencies involved, in trying to design, develop, and deploy the next generation air transportation system. But right now they're trying to develop those requirements. The JPDO is not really producing any products or real air traffic control systems with that money yet.

Ms. BLAKELY. Mr. Chairman, if I could mention one thing, though, because I'd love to show it to this Committee, if there's an opportunity at some point. Mr. Zinser's right, of course. This is not where the primary funding for major capital investments is going to be. But, in addition to all of the very difficult work of coordinating Cabinet-level agencies, and all of the precise work of looking at budgets and research and trying to make sure that they are well aligned, and ultimately presenting a unified budget to the OMB that shows exactly how these programs satisfy the needs to develop an enterprise architecture and a concept of operations for the future, it's tough work. It's very difficult. But, what I'd love to have the Committee see at some point is, one of the demonstration programs that was funded. There was one this fall called Network Enable Operations, NEO, where legacy communications systems—these are not new communications systems, all were linked up and talking to each other in realtime. This is our air traffic control system, this is dispatch from the airlines, this is military information coming in, this is security information. This means, unlike the situations that we have seen where there are aircraft coming into the Washington airspace that no one can identify, and then there is this enormous scramble, often too late, to determine exactly what's going on. Is this an aircraft that has no business being there, and is it one that poses a threat? These systems are able to anticipate much earlier actually what it is, who should be tracking it, what

kind of information you already have, what kind of information you need. And I always found it a very impressive thing that, for relatively little money, you could have all these existing legacy systems talk as though they were one.

Senator BURNS. Well, I looked at this, and I said, "Well, now, if they haven't turned out anything, they've not made any recommendations. I don't know what it is and how come it's costing us \$18 million?" I mean, do we have some other way of designing a modernization program and presenting a master plan, then everything that we do has to fit within that master plan as we modernize? I don't see any reason we couldn't be using that \$18 million someplace else. That's the bottom line. That's the bottom line I drew. And you'll have to convince me otherwise.

Dr. DILLINGHAM. Well, Mr. Chairman, I think that the demonstration projects that the Administrator referred to are, in fact, very costly. And the research that they are contracting for to support the decisions that they have to make is costly, as well. And as it is now, only NASA and FAA are putting in equal shares of money. I think that the Europeans are conducting a similar effort, on a smaller scale, and they're putting in, if not the same kinds of money, more kinds of money, or greater amounts of money, to try and move in the same direction. And I think it's worth noting that, as Senator Lautenberg started asking about, How can we break up some of this congestion, and how can we move to deal with some of the delays that—part of the efforts of the JPDO is to not just reach out to 2015 or 2025, but to sort of transition the current system into the next generation, and, with that, introduce technologies, as appropriate, that would address some of the delays and some of the congestion. And to move in the direction of—we talked about—Senator Stevens talked about the "mosquito fleet," and we're also talking about UAVs and all those kinds of things. Part of the next generation will allow these kind of aircraft to use existing regional airports, so that you take some of the congestion out of the main airports.

So, I guess we're at the point of thinking that it's probably a relatively inexpensive investment for the payoff that is expected from it.

Senator BURNS. It's only been in effect 2 years, so that has to be taken into consideration. We don't do anything around here with lightning speed. So, do that.

That's about all the questions I have for today's hearing. There are some things that I think we've got to discuss as we move forward on reauthorization. I would hope that we could get some kind of an idea out of the Administration down there of FAA, what they want to see in that reauthorization right away. It would certainly help us. It would start that discussion and make sure it's all incorporated in the draft proposal. We'd like to see that as soon as we can.

There's other Members that had questions. If you could respond to those questions, both to the individual Member and to the Committee, I'd certainly appreciate that.

I appreciate you coming, this morning, and sharing your views. I'd like to think that we're very frank and we're very open, and we've got some tremendous problems and challenges ahead of us as

passengers—that list continues to grow, and load factors continue to grow, but it's being done on more aircraft now, and that sort of concerns all of us. We always have to come down on the side of safety. I think that's what this is all about up here.

Thank you very much for coming this morning. I appreciate your testimony.

[Whereupon, at 11:20 a.m., the hearing was adjourned.]

A P P E N D I X

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DANIEL K. INOUYE TO HON. MARION C. BLAKELY

Airport Improvement Program (AIP)

Question 1. The FAA budget would cut almost \$800 million from the AIP account. This cut comes at a time that the Airports Council International—North America (ACI-NA) indicates airport capital development needs across the country are roughly \$70 billion over the next five years. How do you justify such a large cut to the AIP program? Do you have any concerns about the proposed cut?

Answer. Before proposing the \$2.75 billion AIP level, we looked very closely at the impact on airport capital development. In reviewing the issue for the FY 2006 budget, we had noted that the National Plan of Integrated Airport Systems (NPIAS) published in September 2005 showed a 15 percent reduction over previous NPIAS (published in 2002) reporting periods. Our FY 2006 proposed AIP funding level of \$3.0 billion reflected this reduction. As FAA works on the latest issue of the NPIAS (pending), current capital trends show only modest growth—about three percent or \$1 billion over five years. The pending NPIAS figure is still well below the peak level of capital needs identified in the 2002 NPIAS. We also compared the \$2.75 billion budget number to our airport capital improvement plan (ACIP) for projects in FY 2007.

Looking at our ACIP data, the FAA will be able to reach all high priority safety, capacity, security and environmental projects. In particular, there will be adequate funds to meet all current and anticipated Letter of Intent (LOI) commitments, fund projects to meet the FAA's Flight Plan goal for improving runway safety areas (RSAs) and help airports meet their Part 1542 security requirements. We will also be able to continue work on phased projects. It will slow some rehabilitation projects and projects to bring airports up to current FAA design standards.

The President's Budget includes support of major capacity projects such as the Chicago O'Hare redesign, new runways at Washington Dulles International Airport and major projects at Atlanta-Hartsfield International. The major capacity projects are multi-year projects that are unaffected by the decrease in the AIP budget due to their high priority within the national system.

Question 2. Funding the AIP program below \$3.2 billion triggers a formula change that would eliminate guaranteed annual entitlements for non-primary or General Aviation (GA) airports. Did this factor into your budget calculations? Would you seek a legislative fix from Congress to ensure that all airports would receive a portion of the lower funding total or would you focus only on priority projects? Do you anticipate annual AIP requests for the duration of your tenure will be below the \$3.2 billion level that triggers this adjustment?

Answer. Since the first year that the nonprimary entitlements authorized in AIR-21 became available, these airports have received up to \$900,000 in entitlement funds dedicated to their individual airports. Many airports have been able to use that money to fund their capital projects and even have begun to construct fuel farms and hangars—projects that were previously ineligible for AIP. For the nonprimary airports, (general aviation (GA) and the smallest of the commercial service airports) we have seen a dramatic increase in the amount of general aviation entitlement funds being carried over. In fact, 52 percent of the total AIP carryover, or over \$200 million, is from general aviation airports. GA airports carried over nearly 60 percent of the total entitlement that was allocated to them. While the nonprimary entitlement would not be available in FY 2007 under the President's budget, the unassigned state apportionment, which is also directed toward nonprimary airports, would increase by 63 percent.

For these reasons, we do not believe that a legislative change to preserve the non-primary entitlement is necessary in FY 2007. Indeed any effort to preserve the non-primary entitlement at the President's requested funding level for AIP without also

preserving a minimum amount of discretionary funds would impair our ability to meet the national priorities outlined above.

When we consider an appropriate level for the AIP budget, we look at the airport planning data, our LOI and other high priority and phased projects. As we look toward the FY 2008 reauthorization, we are reviewing the formula changes as well as overall funding level to ensure the maximum utility of the AIP investment.

Question 3. China has announced its intention to provide \$17.4 billion over the next five years to improve its airport infrastructure—almost \$3.5 billion a year. Effectively investing more than the U.S. on airports for the first time ever. Do you have any thoughts about the Chinese commitment to its aviation future?

Answer. The FAA is encouraged by the Chinese Government's commitment to improve and expand its airport infrastructure. This responsible investment to meet the challenges posed by an aviation system that analysts project will experience double digit growth in coming years is an indication that China intends to be a preeminent aviation destination and hub. Even with such an investment, the number of airports available in China's less mature aviation system for civilian use is far below the extensive system in place in the United States.

A comparison of China's current plan for airport investment with the FY 2007 budget request for AIP is not an accurate basis for comparing each country's long-term commitment to aviation. Although the United States has invested over \$16.7 billion since FY 2001 in its airports, with more than \$3.4 billion in additional funds to be provided this fiscal year, AIP funds only account for approximately 20 percent of capital expenditures at U.S. airports. The remainder comes from airport operators, and thus mainly from local and state governments. Thus, looking at the total commitment of funds for airport development from all levels of government in the United States, the United States' commitment exceeds that being made China.

Facilities and Equipment (F&E)

Question 1. Although the FAA FY07 budget claims it "supports an interagency effort to develop the Next Generation Air Transportation System (NGATS) to meet growing demand for airspace capacity," a preliminary analysis by the DOT Inspector General's Office finds that the level of funding contained in the Administration's F&E request and five-year capital investment program (CIP) will not support the Next Generation system. Do you believe the current budget numbers do enough for NGATS? How much funding do we actually need through 2025 to meet the needs of NGATS? When will the FAA put forward a comprehensive plan/blueprint for NGATS?

Answer. The cost levels in the FY 2007 CIP are adequate to begin NGATS implementation for those JPDO initiatives that are sufficiently developed. The FAA plans to begin implementation of two foundational JPDO projects with the FY 2007 budget: Automated Dependent Surveillance Broadcast (ADS-B) and System Wide Information Management (SWIM). The budget also allows for continued concept development of future initiatives.

In addition, two of today's major modernization initiatives contained in the CIP will help the NAS transition towards the needs of NGATS. This includes working with the FAA to analyze the changes that will be needed to both the En Route Automation Modernization (ERAM) system and the Traffic Flow Management (TFM) system that is necessary in order to meet the needs of 4-dimensional air trajectory-based operations—a key NGATS capability. This is a critical element in transforming flight planning and air traffic paradigms into a system that manages operations based on aircraft trajectories, regularly adjusts the airspace structure to best meet user and security/defense needs and relies on automation for trajectory analysis and separation assurance.

In order to address the funding issue, we have asked the NGATS Institute to host a series of forums so that the critical assumptions and uncertainties underlying any cost benefit effort can receive scrutiny and be validated for further use. The forums will involve a wide cross-section of aviation decision-makers. In addition, further detailed studies will focus on the near term costs and benefits which will be used to inform more immediate agency planning activities over the next 5 years. We will then expand our cost analysis to consider the expected total systems costs for NGATS.

An initial operational improvement roadmap is now under technical review and later this year the JPDO will unveil its first iteration of the NGATS Enterprise Architecture and Concepts of Operation. As the JPDO increases the level of specificity of the technical documentation and validates it through simulation, the confidence in the cost estimates will increase.

Question 2. The FAA's FY07 budget provides some funding to consider consolidation of air traffic control (ATC) facilities. What is the status of the FAA's efforts on

considering consolidation of facilities? Has the FAA made any determination or targeted any facilities to date?

Answer. FAA's policy is to consider relocating a Terminal Radar Approach Control (TRACON) facility to another location anytime construction of a new Airport Traffic Control Tower is considered. Other opportunities where existing facilities are currently capable of accepting a collocation are also considered. In the FY 2007 budget request, the agency is proposing the following collocations: Lincoln to Omaha, West Palm Beach to Miami, and Reno to Northern California TRACON. In addition, Palm Springs is planned to be collocated to Southern California TRACON in FY 2006. Other collocations are being evaluated and may be submitted in future budget requests.

Airport and Airways Trust Fund Status

Question. The Congressional Budget Office's (CBO) most recent projections of Trust Fund balances indicate steadily increasing revenues and uncommitted balances for the Trust Fund through the next decade, up to more than \$49 billion by FY 2016 based on a re-estimate of the President's FY 2007 budget request. What is your reaction to the CBO estimates? What are the FAA's longest current projections for the Trust Fund? Please provide those estimates.

Answer. The FAA forecasts tax revenue into the Trust Fund for a ten-year period, but does not issue specific long-term projections for the Trust Fund balance due to the significant uncertainty surrounding out-year budget authority assumptions. However, like the CBO, we do look at several different scenarios for the Trust Fund balance as part of our normal business planning process. We have attached the tax revenue forecast FAA provided to the CBO in December 2005. These figures are generally consistent with the numbers in the CBO projections (which also include interest earned on the Trust Fund's cash balance).

Based on the budget authority assumptions for FY 2007 through FY 2011 in the FY 2007 President's Budget request, the referenced CBO uncommitted balance estimates are generally consistent with the Administration's estimates. (Both project an uncommitted balance of \$15.5 billion in FY 2011.) As the alternate CBO runs demonstrate, the uncommitted balance projections are highly sensitive to changes in the budget authority assumptions. For instance, CBO's "Vision 100" estimate shows the Trust Fund's uncommitted balance remaining flat at approximately \$1.5 billion through FY 2016—meaning that there would be very little reserve in the case of unforeseen changes in the aviation industry.

It is important to emphasize that the FAA's belief in the need for a new funding mechanism is not fundamentally about generating more money for the FAA. It is about creating a more rational, equitable and stable system that provides the right incentives to users and to the FAA, and thereby reducing the likelihood that there will be a persistent gap between revenues and costs.

Air Transportation Oversight System (ATOS)

Question. Last year, the agency estimated that it would take approximately 300 additional inspectors to bring remaining carriers into ATOS compliancy. How many staff have you added to meet this goal? Considering the current shortage of inspector staffing, how does the agency expect to have ATOS fully implemented by the end of next year? Are you presently concerned about creating any gaps in the inspections system as a result of the shortages?

Answer. The FAA is requesting an additional 101 inspectors for risk management and safety oversight. Some of these inspectors will be assigned to ATOS air carriers which will allow full implementation of ATOS by the end of next year.

We are able to realize full implementation with fewer than 300 additional staff due to the efficiencies that will result from the expansion of ATOS to all part 121 air carriers, e.g., sharing certain resources amongst multiple air carrier certificate management teams and through improvements to ATOS automation capabilities. FAA is not currently concerned about any inspection gaps. We are confident that System Safety Oversight will be strengthened through a more efficient use of resources and improved automation.

FAA's Telecommunications Infrastructure (FTI)

Question. Do you believe that the FTI transfer will be completed by its scheduled December 2007 completion date? Has the current schedule kept pace with any transition plans or master schedules you have developed for the program? What benefits were identified prior to implementation of the FTI program? Are these goals being met?

Answer. The FTI transition master schedule calls for completing the transition of all services on the LINCS network by December 2007. There are services supported by other legacy networks that do not have the same time criticality and may be

transitioned after December 2007. The LINCS Bridge contract ends on March 13, 2007, and there is a one-year Continuity of Service option that the FAA can exercise to extend the period of performance to March 2008. However, at this point, the planned end date for FTI transition remains December 2007.

The FTI program was re-baselined in December 2004. The associated schedule called for a relatively steep ramp-up in the number of sites to be transitioned to the FTI network. By April 2005, it became apparent that the ramp-up was not achievable. The FAA and the FTI Service Provider implemented extensive process improvements to increase transition rates. As part of this activity, revised planning targets were set for the remainder of the transition period from April 2005 through December 2007 and documented within the program's Exhibit 300 that is submitted to OMB. Over the past 13 months, the FTI program has kept pace with the revised planning targets for site transitions and has significantly increased the number of service transitions from less than 100 per month to over 700 per month.

The FTI program is expected to provide a wide range of benefits to the FAA. Some of the benefits are quantifiable while others are more qualitative. Examples of the quantifiable benefits include:

- Improved service availability: FTI services are specified to provide a higher level of availability than the FAA's legacy services. In addition, FTI services eliminate the need for FAA-provided communications equipment that lowers the end-to-end availability observed by the end user.
- Faster service delivery: Once the FTI transition is completed, FAA users will be able to order and have an FTI service delivered in as few as 15 days. This represents a three-fold improvement compared to legacy networks.
- Lower unit cost of service: The FAA's recurring costs for telecommunications will be lower under FTI compared to what it is under the legacy networks. This translates into significant costs savings/cost avoidance benefits. It should also be noted that FTI prices are capped and can never exceed the price levels negotiated for contract year 7. In addition, there is a price management mechanism for adjusting prices downward if the cost of services in the commercial or government marketplace declines.

The non-quantifiable benefits include:

- Performance-based Contracting: The FTI program has a balance of positive and negative incentives to ensure that FAA objectives for the program are met. FTI has a detailed Service Level Agreement (SLA) that provides invoice credits to the FAA if services do not perform as required.
- Improved information security: FTI provides an enterprise-wide approach to information security assurance. The FTI service provider is contractually required to comply with the latest government standards for information security. In addition, FTI provides a wide range of enhanced security services like encryption and fire walling that can be ordered as an add-on feature with any service.
- Consolidated management of the FAA's Telecommunications Operating Environment: By replacing the services provided by 8 different legacy networks, FTI enables the FAA to streamline its management of its telecommunications enterprise. Today, each of the legacy systems is separately managed, separately invoiced, and separately operated. With the implementation of the FTI network, the FAA can consolidate these functions and operate more efficiently.
- Broad portfolio of service offerings: FTI provides a broad range of service offerings that enables the FAA to match price to performance and ensure that the FAA only pays for the level of service that it requires.

The FTI program is meeting its goals in terms of providing the benefits listed above. However, it should be noted that there has been some erosion of cost savings/avoidance benefits due to the transition shortfalls noted earlier. That notwithstanding, previous analysis has shown that even with a one year delay, the FTI program still has positive net present value (NPV) in excess of \$350 million.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. FRANK R. LAUTENBERG TO
HON. MARION C. BLAKELY

Question 1. Does FAA have a staffing standard for air traffic controllers?

Answer. Yes, the FAA has staffing standards for air traffic controllers. These standards are mathematical models used to compute the number of personnel required to perform a job or set of tasks. FAA staffing standards are developed through industrial engineering techniques and operations research analysis such as

time study, work sampling, and statistical analysis. FAA standards include appropriate allowances for leave, training, travel, and necessary administrative activities needed to accomplish a function.

Question 2. How many air traffic controllers are needed to move air traffic safely at Newark Liberty Airport?

Question 2a. When will the FAA know the answer to this?

Answer. The initial staffing level for Newark Liberty Airport Traffic Control Tower is estimated to be 35 air traffic controllers. This staffing level is adequate for shift coverage, controller training and annual leave requirements. We will continue to review staffing requirements as the ATO implements efficiency and productivity initiatives to provide optimal staffing while maintaining safe operations.

Question 3. How many air traffic controllers do you intend to hire next year?

Answer. The FAA intends to hire 1,136 air traffic controllers in FY 2007.

Question 4. How many were hired last year?

Answer. In FY 2005, 438 air traffic controllers were hired.

Question 5. Does the FAA have any future plans to outsource or privatize any part of the air traffic control system?

Answer. The FAA has no plans to privatize the entire air traffic control system. We will continue to look for opportunities to achieve cost savings and efficiency improvements throughout the FAA, consistent with our mandate from Congress to operate more like a business. Some of these opportunities may involve partnering with the private sector. For instance, we will continue the contract tower program and are implementing the recent contract awarded to Lockheed Martin through the A-76 process to operate flight service stations. The contract tower program saves taxpayers over \$54 million per year. The A-76 competition for the flight service station program will save \$66 million in FY 2007, and a total of \$2.2 billion over 13 years, while providing better service to the flying public.

In everything the FAA does, safety will remain our number one priority. Our overarching goal is to achieve the lowest possible accident rate, while constantly improving safety. Therefore, we always undertake our efforts to control operating costs in the context of maintaining the safest aviation system in the world.

Question 6. Has the FAA performed a cost estimate of the “Next-Generation Air Transportation System”? If so, what is that estimate?

Answer. The FAA and the JPDO realize the necessity of developing a comprehensive cost model for NGATS. This is critical for the program’s budgeting and planning and naturally is a matter of considerable interest to Members of Congress. However, in order to develop a working cost model that reflects the near-term and long-term cost for NGATS, it is critically important to specify the NGATS system and transition roadmap to a greater level of detail and develop a consensus, not just between governmental entities, but with industry, regarding the key assumptions that will govern the development of the estimate.

In order to address the funding issue, we have asked the NGATS Institute to host a series of forums so that the critical assumptions and uncertainties underlying any cost benefit effort can receive scrutiny and be validated for further use. The forums will involve a wide cross-section of aviation decision-makers. In addition, further detailed studies will focus on the near term costs and benefits which will be used to inform more immediate agency planning activities over the next five years. We will then expand our cost analysis to consider the expected total systems costs for NGATS.

Question 7. Has FAA performed or analyzed recent studies regarding the adequacy of the “Age 60” rule for pilots? Is FAA considering revising this rule?

Answer. The FAA has conducted five studies, using various analytic methodologies, on the relationship of pilot age to accidents. The most recent study, published in April 2004, corroborates the findings of two previous empirical studies—specifically that accident rates appear to increase with pilot age. Recent non-FAA research, published in 2005 in open, peer-reviewed scientific literature, reported that the risk of violations of flight regulations increased with age in a longitudinal study of commuter air carrier and air taxi pilots. Violations of flight regulations are important indicators because pilots with violations are more likely to be involved in accidents or incidents than pilots without violations.

The “Age 60 rule” has served well as a regulatory limit in the United States. The FAA recognizes that science does not absolutely dictate what age is most appropriate for retirement. No absolute, scientific formula may readily be applied to predict progressive, anatomic, physiological, and cognitive decline associated with aging because it is variable in severity and onset among individuals. The consistency of findings across empirical studies, however, suggests that changes to the “Age 60

rule" should be approached cautiously; so, we presently have no plans to revise the rule.

Question 8. Can the FAA meet the requirement of Public Law 109-115 which states: "Provided further, That not later than December 31, 2015, the owner or operator of an airport certificated under 49 U.S.C. 44706 shall improve the airport's runway safety areas to comply with the Federal Aviation Administration design standards required by 14 CFR part 139: Provided further, That the Federal Aviation Administration shall report annually to the Congress on the agency's progress toward improving the runway safety areas at 49 U.S.C. 44706 airports."? If not, why not?

Answer. FAA's goal, and now Public Law 109-115's requirement, to improve all runways subject to 14 CFR Part 139, *Certification of Airports* (Part 139), to meet standards for runway safety areas (RSA) is on schedule. It must be noted, however, that Part 139 requires RSAs to meet design standards "in a manner authorized by the Administrator." We have consistently interpreted this to mean "to the extent practicable," in recognition that it is simply not feasible to get a full standard RSA at every runway. When we started the special emphasis on accelerating RSA improvements in FY 2000, we identified a total of 456 RSAs needing improvement. From FY 2000 through the end of FY 2005, improvements had been completed at 208 RSAs. Thirty four RSA's are scheduled for completion in FY 2006. By FY 2010, ninety-two percent of the total 456 RSA improvements will be completed. The remaining RSAs (39) are scheduled to be upgraded between FY 2011 and prior to December 31, 2015.

We would also emphasize that our policies require constant reevaluation of any RSA that cannot fully meet design standards. As conditions at and/or near an airport change, or technology for arresting systems advances, it may be practicable in the future to meet RSA standards where today it is not.

Question 9. Does FAA have data that indicates simultaneous extension of the landing gear and landing flaps on the Mitsubishi MU-2 presents a safety problem? Has FAA investigated this situation? Do you believe it is a safety concern?

Answer. There is no FAA data to show that the simultaneous extension of the landing gear and flaps has caused an accident or presented a safety problem.

Question 10. According to FAA data and other accident data, what is the prevalence of false fire warnings involving the Mitsubishi MU-2? Has FAA investigated this? Does FAA consider the potential for false fire warnings a safety concern? If so, what has FAA done to address it?

Answer. False fire warnings were reported in the earliest models of MU-2. This problem was corrected and there is little data indicating this is now a problem. The FAA considers false fire warnings or any false warning a safety concern and addresses those issues immediately. Pilots operating under 14 CFR part 135 are required by the FAA to be trained, qualified, and tested on normal, abnormal and emergency procedures including engine fires and fire warnings that may occur in any phase of flight.

Question 11. According to the MU-2 maintenance manual, the pilot should visually confirm if there is a fire prior to securing the engine. Does FAA believe this is appropriate, given the aircraft's operational history and the prevalence of false fire warnings?

Answer. The Aircraft Flight Manual and the aircraft checklist, not the maintenance manual, require the pilot to confirm if there is a fire prior to securing the engine. Best practice would be to visually confirm evidence of the problem. The recommendation to visually confirm the existence of a fire is standard procedure in operation of light twin engine aircraft, including the MU-2. The FAA will continue to investigate and validate alleged false fire warnings and will take appropriate action.

Question 12. Is there any reason to believe that the Mitsubishi MU-2 aircraft's fire warning device is not accurate or reliable? For similar aircraft, does FAA require visual checks for fire in order to confirm a fire warning device before securing the engine? If so, which aircraft? Which aircraft did FAA certify that do not require a visual check for fire to confirm a warning device before securing the engine?

Answer. No. Currently the FAA does not have any indication through Service Difficulty Reports, manufacturer's information or safety recommendations that the Mitsubishi MU-2B fire warning system is inaccurate or unreliable. National Transportation Safety Board (NTSB) investigations on some MU-2B accidents are still pending. If the NTSB investigation finds evidence that the aircraft's fire warning is not accurate or reliable we will take appropriate action.

With regard to other aircraft the FAA does not require visual checks. FAA policy (14 CFR part 23) states that the airplane flight manual (AFM) should include procedures for "proper pilot response to cockpit warnings." The FAA evaluates the procedures during the normal certification process. It may be prudent to proceed directly

to securing the engine if it is not physically possible for the pilot to visually confirm the presence of a fire due to an aircraft's particular geometry, engine location, fire location, etc.

In order to provide a complete list of aircraft that the FAA certified that do not require a visual check we would have to review the AFM's of every airplane. The FAA reviewed a sample of five different flight manuals to identify procedures for responding to in-flight engine fire indications. The AFMs reviewed were those for the Cessna 208, Pilatus PC-12, Pilatus PC-6 (turboprop), Aero Vodochody Ae 270, and PZL-Mielec PZL M28-05. All AFMs directed the pilot to proceed directly to securing the engine based on fire warning lights.

Question 13. Has the FAA tested the Mitsubishi MU-2's propensity to roll inverted faster than a pilot could react when stalled or with only one engine running?

Answer. Members of the Flight Standardization Board evaluated the Mitsubishi MU-2 aircraft using the current Practical Test Standards that would be used for a private pilot, commercial pilot or airline transport pilot applicant who chose to use the MU-2 aircraft for the practical test. All of the various stall maneuvers for each test were evaluated and in all cases, the MU-2 aircraft did not display any propensity to roll when stalled.

Operations with the critical engine inoperative were demonstrated including all of the single engine maneuvers required by the appropriate practical test standard. During this portion of the evaluation, the aircraft did not display any propensity to roll.

As part of the review conducted in 2005, comments from training establishments and operators (commercial and private) were taken into consideration and at no time was there any feeling that the roll rate was a factor.

As in any aircraft, if a pilot is "behind the aircraft" for any reason, whether it be complacency, distractions or work load at that particular time, it would contribute to a loss of control following engine failure. Training for engine out in a multiengine aircraft emphasizes the need to maintain sufficient airspeed to avoid a stall with one engine inoperative and a pilot is required to demonstrate flight at the minimum controlled airspeed in that mode.

Question 14. When will FAA propose an airworthiness directive regarding the Mitsubishi MU-2's fuel delivery system?

Answer. Reviewing engine failures in the MU-2B airplane was a part of the safety evaluation. You may find the FAA final report with more detailed information at the following internet site: www.faa.gov/aircraft/air_cert/design_approvals/small_airplanes/cos/mu2_foia_reading_library/.

FAA review of the available in-flight shut down data for the Honeywell TPE331 series engines from the past 10 years does not indicate a trend in engine problems. Occasionally, service difficulties are submitted to the FAA and to Honeywell without identifying the root cause of the in-flight shut down. The FAA is not aware of specific engine or aircraft fuel delivery problems. However, as indicated in the proposed action for the airframe and engines, the FAA is evaluating the need to mandate several Japanese Civil Aviation Bureau (JCAB) engine and propeller related airworthiness directives (AD). These JCAB ADs include two that address fuel flow and the fuel control, although neither is suspected as a contributing factor in any accident. The Notice of Proposed Rulemaking (NPRM) concerning the flight idle fuel flow setting was issued on April 21, 2006. (Reference Docket No. FAA-2006-23884.) This comment period closes on June 15, 2006. Additionally, the NPRM concerning the inspection of the engine torque indication system was issued on April 21, 2006. (Reference Docket No. FAA-2006-23883.) That comment period also closes on June 15, 2006.

Question 15. Does the FAA feel that proper pilot training could have prevented all crashes involving the MU-2?

Answer. The FAA believes that training is integral to the safe operation of any aircraft and places a high level of importance on it. The December 2005 FAA MU-2B Series Safety Evaluation Report determined that a number of factors contributed to the MU-2 accidents. Training alone is unlikely to have prevented all accidents. Nevertheless, the FAA is, at this time, evaluating options to address all of the factors, including training. Some changes that are expected to be made in training are:

- All initial, recurrent, transition, re-qualification or differences training be required in the MU-2 exclusively in accordance with the manufacturers approved training program.
- Flight reviews for operators of MU-2 conducted under the Code of Federal Regulation 14 CFR 61.56 will be required in the MU-2 itself as opposed to any airplane multi-engine, land.

- Landing currency requirements under 14 CFR 61.57 must be maintained in the MU-2 exclusively. Landing done in other multi-engine airplanes will not be credited for landing currency in the MU-2.

Question 16. How does the FAA enforce regulations concerning maintenance/repair of smaller (non-commercial passenger) aircraft by non-FAA certified repair stations?

Answer. FAA oversees these maintenance activities by inspection of the aircraft, review of the aircraft maintenance records and performing surveillance on the certificated mechanics and inspection authorization holders that provide the maintenance and inspection of these aircraft. This surveillance includes verification that the work was done in accordance with appropriate data using the proper equipment to perform the maintenance.

Question 17. How does FAA enforce regulations requiring FAA Inspection Authorizations for certain repair work by non-certified repair stations?

Answer. Aircraft mechanics with inspection authorization are certificated in accordance with 14 CFR part 65 to perform aircraft maintenance. These mechanics are overseen through planned scheduled surveillance with National Work Program Guidance and non-scheduled surveillance of the mechanic including verification that the work was done in accordance with appropriate data using the proper equipment to perform the maintenance, inspection of aircraft they maintain, review of the aircraft maintenance records they make, and review of the FAA Form 337 they complete for each major repair and alteration. Furthermore, each inspection authorization holder's authorization is renewed once a year verifying that they continue to meet performance and currency requirements to retain their inspection authorization.

Question 18. As part of FAA's "comprehensive safety evaluation of the Mitsubishi MU-2," did the agency review all the flight test data that was generated to comply with certification provisions? Was that data actually used to satisfy compliance, especially with respect to "controllability" and "stalls"?

Answer. The FAA evaluation team reviewed the flight test reports from the original validated type certificate (TC) (TC No. A2PC) and the original type certificate (TC No. A10SW). In addition, the team reviewed the test reports from the 1984 and 1996 Special Certification Reviews (SCR). All of these reports included "controllability" and "stalls" compliance.

The data used for showing compliance for the original type certificates were used to verify the airplane met its certification basis during the two SCRs and this most recent Safety Evaluation.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. FRANK R. LAUTENBERG TO
TODD J. ZINSER

Question 1. Has anyone at USDOT performed a cost estimate of the NGATS? If so, what was the result?

Answer. The costs associated with the next generation air transportation system for FAA (new ground systems) and airspace users (new avionics) remain undefined. The JPDO's recent progress report to Congress was silent on financial requirements and there are no formal cost estimates for NGATS. We have seen some preliminary estimates developed by FAA but caution there are considerable unknowns, and costs depend on, among other things, performance requirements for new automation and weather initiatives and to what extent FAA intends to consolidate facilities. The JPDO is conducting workshops with industry to help refine the costs, requirements, and milestones associated with the next generation system. However, FAA will have to analyze this information and provide Congress with expected funding requirements and when the funding will be needed.

Question 2. Does FAA have an adequate system in place to determine whether the number of air traffic controllers assigned to a particular facility will provide for the safety of air traffic operations?

Answer. No, the current staffing standards used by FAA do not adequately reflect staffing needs at individual facilities. FAA has used the current staffing standard models to determine controller staffing levels since the 1970s. The models are generally accurate at the "macro" level because they were designed to generate national estimates, but they do not adequately reflect staffing needs at the facility level.

FAA is aware of the need for staffing standards at the facility level. In FAA's controller workforce plan, issued in December 2004, FAA committed to reassessing its air traffic staffing models for terminal and en route operations. According to FAA, the reassessment will be conducted with a view towards achieving a staffing esti-

mating methodology (either a revised staffing standard model or another estimating model) that yields high confidence staffing estimates at the national and facility levels.

In May 2005, we recommended that FAA begin its planned reassessment of the current staffing standards as quickly as possible. Accurate facility staffing requirements are particularly important as FAA begins implementing its workforce plan to hire 12,500 new controllers over the next 10 years. FAA has begun its assessment of staffing standards at en route facilities, the first planned locations: however, as of April 2006, those actions had not yet been completed.

Question 3. Is the FAA on track to meet its staffing plan for air traffic controllers?

Answer: In FY 2005, FAA hired 438 new controllers, which was inline with the plan's projection. For FY 2006, FAA plans to hire 1,249 controllers, which is also inline with the plan's projection. However, in its FY 2007 budget request, FAA has stated that it may need to revise its planned number of new hires for FY 2006 in order to meet the 1 percent government-wide rescission.

In addition, actual controller retirements have been more than what was projected in the agency's workforce plan. In FY 2005, 465 controllers actually retired compared to 341 projected in the plan—36 percent more than what was projected. FAA needs to review and update the methodology it uses in calculating projected retirements before the next update to the plan.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. FRANK R. LAUTENBERG TO
GERALD L. DILLINGHAM, PH.D.

Question 1. Does FAA have an adequate system in place to determine whether the number of air traffic controllers assigned to a particular facility will provide for the safety of air traffic operations?

Answer. We have not evaluated the adequacy of FAA's procedures for staffing its air traffic control facilities. Historically, FAA has computed the number of controllers needed on a system-wide basis, but distribution of these totals to the facility level was a negotiated process. The Department of Transportation Inspector General reported that FAA's staffing standards do not take into account the significant difference in complexity and workload among FAA's 300 terminal and en route control facilities and can lead to staffing imbalances.

FAA has begun developing and implementing new staffing standards that use an algorithm that incorporates traffic levels and complexity of traffic at the facility level to determine the number of controllers needed, according to an FAA official. The official stated that FAA plans to address specific facilities whose characteristics do not lend themselves to formulaic evaluation, such as the Cleveland en route center, where domestic airspace and international airspace are mixed. At such facilities, FAA plans to conduct on-site reviews to develop qualitative data to determine the number of controllers needed.

FAA is working with Mitre Corp. to further refine its process for determining controller staffing needs. The ultimate objective is to assess the traffic level and complexity on a sector-by-sector basis to develop more accurate controller staffing requirements. FAA expects that the new process will also consider the anticipated losses at each facility to determine the hiring needs. Facilities with fewer losses would get fewer trainees. In the past, the number of trainees was computed as a percentage of total facility staff.

Question 2. Is the FAA on track to meet its staffing plan for air traffic controllers?

Answer. While FAA met its Fiscal Year 2005 staffing plan by hiring 438 controllers (3 more than its target), FAA is not keeping pace with its updated air traffic controller staffing plan to hire 930 controllers in Fiscal Year 2006. As of early May 2006 it had hired about 400 or less than 50 percent, according to an FAA official. To meet its 2006 staffing plan, FAA needs to hire about 530 controllers in the remaining five months of this fiscal year.

FAA's soon-to-be-published staffing plan update will show reduced hiring needs for the next few years, compared to those published in its 2004 plan, according to an FAA official. The 2004 plan was based on FAA's 2004 air traffic forecast. FAA's 2006 air traffic forecast shows less air traffic over the next few years, compared to 2004. Consequently, FAA has reduced its near term controller hiring plans accordingly, and plans to revise its staffing plans annually based on the air traffic forecast. While the controller hiring target was constrained by the Fiscal Year 2005 budget, FAA has the budget needed to hire the planned number of controllers in Fiscal Year 2006, according to an FAA official.

Question 3. Has anyone at USDOT performed a cost estimate of the “Next-Generation Air Transportation System?” If so, what was the result?

Answer. To our knowledge, no formal cost estimates exist for the NGATS. However, FAA’s Research, Engineering and Development Advisory Committee (REDAC) and Air Traffic Office (ATO) have separately developed preliminary estimates. In both cases, these estimates were presented as unofficial and had not received any formal approval from any agency. REDAC estimated FAA’s costs to implement NGATS under 3 scenarios. Two scenarios assume varying levels of productivity improvements under NGATS. Under these scenarios, FAA’s total cost to operate the NAS over the next 20 years will average about \$15 billion, in constant \$2005 dollars, with or without implementing NGATS. Only under the third scenario, where there would be no productivity increases, would NGATS cost more than the status quo. REDAC notes that continuing the status quo, without implementing NGATS, is not a viable option because, without the capacity increases from the NGATS, demand would exceed the capacity in enough places in the United States to have a significant impact on the overall economy.

FAA’s Air Traffic Organization estimates that FAA’s Facilities and Equipment cost for NGATS will total about \$15 billion between 2006 and 2025, in addition to projected Facilities and Equipment costs without NGATS. In contrast to the REDAC estimate, the ATO did not estimate the NGATS’ impact on FAA’s operating or other costs. The ATO’s estimate for Facilities and Equipment is higher than the Facilities and Equipment component of REDAC’s estimate. We have not analyzed reasons for the differences between these estimates.

Developing a cost estimate for the NGATS is difficult due to the many assumptions that must be made about the policies and technologies that will be used in the future system. The difficulty is compounded in obtaining consensus among numerous stakeholders on what these assumptions should be. An additional factor is the amount of success that the Air Traffic Organization (ATO) will achieve in cutting its costs. For example, an annual savings of \$500 million per year could substantially offset the cost of NGATS. We are currently reviewing the ATO’s efforts to reduce its costs and expect to issue a report later this year.

To develop better estimates of the cost of NGATS, the Joint Planning and Development Office (JPDO) recently held the first in a series of three workshops with stakeholders. The first workshop convened representatives of commercial and business aviation—operators of high performance aircraft including airliners, regional jets, business jets and turboprops operated by major and regional air carriers, cargo air carriers, on-demand air carriers (traditionally air taxis), corporate aviation, fractional ownership programs and others. JPDO plans to target the second workshop to focus on the military and public safety concerns, and the third to focus on airports and state/regional aviation groups—airports and other public and local, state and regional planning bodies. Although one of the goals of the meeting was to develop better cost estimates of the cost of NGATS, the first workshop did not result in any cost estimates. Workshop participants noted that before cost estimates can be developed, they need FAA’s description of system-wide operational capabilities and benefits for users.

